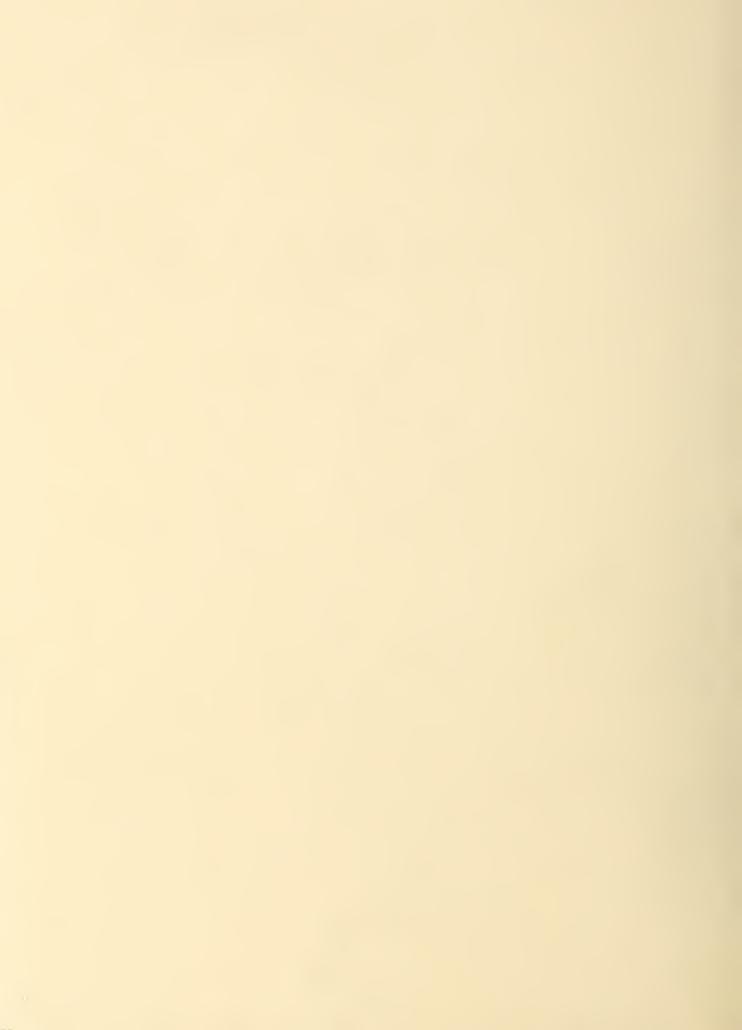
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March 1995



## Helicopter Glacier Tours

Final Environmental Impact Statement

Alaska Region
Tongass National Forest
Chatham Area
Juneau Ranger District







## RECORD OF DECISION USDA FOREST SERVICE

## Helicopter Glacier Tours Final Environmental Impact Statement Juneau Ranger District Tongass National Forest - Chatham Area

This RECORD OF DECISION documents my decision concerning whether or not to authorize Temsco Helicopters, Inc., Coastal Helicopters, Inc., and Era Helicopters, Inc. to conduct helicopter glacier tours on the Juneau Icefield, within the Juneau Ranger District, through 1999. This decision is based upon the analysis and evaluation in the Final Environmental Impact Statement.

#### ALTERNATIVES SELECTED FOR DETAILED EVALUATION

Seven alternatives were evaluated, including the No Action Alternative. The range of alternatives addressed the major issues associated with this project. The six action alternatives differed from each other in various components.

The alternatives are summarized as follows:

#### Alternative A - No Action

Alternative A would deny the applicants' request to land and conduct helicopter glacier tours on the Icefield.

#### Alternative B - Proposed Action

Alternative B would authorize issuance of five year permits as requested by the operators. By 1999, Temsco would be authorized 12,663 landings; Coastal would be authorized 525 landings; and Era would be authorized 9,033 landings. Landings would be authorized within all zones of the Juneau Icefield Study area.

#### Alternative C - Authorize Current Level of Landings Through 1999

Alternative C would limit the annual helicopter tour landings through 1999 to the levels approved for 1994. Temsco would be authorized 7,587 landings; Coastal would be authorized 57 landings; and Era would be authorized 4,003 landings. No landings would be allowed on Eagle Glacier, Twin Glacier, or Death Valley Zones.

#### Alternative D - Authorize Mid-level Number of Landings Through 1999

Alternative D would authorize additional helicopter landings through 1997, after which authorized landings would remain at the 1997 level through 1999. By 1997, Temsco would be authorized 11,172 landings; Coastal would be authorized 326 landings; and Era would be authorized 7,541 landings. In addition, the helicopter landing tours would not be allowed on one weekend day each week.

#### Alternative E - Satellite Heliport

Alternative E would be similar to Alternative B - Proposed Action except that a new satellite heliport would be located between miles 25 and 28 on the Glacier Highway.

#### Alternative F - 1994 Level with Limited Hours and Days

Alternative F would be similar to Alternative C - Authorize Current Level of Landings Through 1999 with the additional restriction of limiting landing of all tours at the Icefield to the hours of 9:00 am through 6:00 pm. Also landing tours would not be allowed one weekend day each week nor on holidays.

Alternative G - Authorize A Mid-level Number of Landings Through 1999 With Landing-Free Zones Alternative G was developed and analyzed in the FEIS in response to comments on the DEIS. Alternative G would authorize the same number of landings as Alternative D except that landings would be allowed seven days per week and no landings would be allowed on the Eagle Glacier, Death Valley, or Twin Glacier Zones.

#### ENVIRONMENTALLY PREFERRED ALTERNATIVE

Alternative A - No Action is the environmentally preferred alternative. The definition of environmentally preferred is the alternative which causes the least damage to the biological and physical environment, and which best protects, preserves, and enhances historic, cultural, and natural resources.

#### DESCRIPTION OF THE FOREST SERVICE PREFERRED ALTERNATIVE

The Forest Service preferred alternative will be used in the development of the authorizations by special use permits.

Based on the analysis and evaluation in the Final Environmental Impact Statement for the Helicopter Glacier Tours, it is my decision to select Alternative G - Authorize a Mid-level Number of Landings Through 1999 With Landing-Free Zones.

Included in this alternative is my decision to delete Mitigation 1, presented in the Draft Environmental Impact Statement. This mitigation would have required the issuance of a Forest Order which would have prohibited point-to-point helicopter transport of passengers without a special use permit within the Juneau Icefield Study Area. My decision to not allow this mitigation was based on points made by a large percentage of respondents to the DEIS. The issue was that such a mitigation would force the helicopter companies to limit small individual trips for sightseeing, skiing, photography, parasailing and hiking.

The Forest Service does not have jurisdiction to regulate helicopter flight paths, altitudes, or noise over residential areas. The only authority the Forest Service has with regard to helicopter landing tours is where and how many helicopters may land on National Forest System lands. This decision does, however, consider the effects of noise to recreation users, wildlife, and residents.

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I have selected Alternative G partly because of the uncertainty regarding the long term social impacts of steadily increasing helicopter activity on the human environment outside the jurisdiction of the Forest Service. Clearly, the annoyance of local residents will increase as the numbers of helicopter flights increase. Contacts with the City and Borough of Juneau indicate an awareness of this controversy and the need for CBJ to address the issue either through ordinance or through initiation of a Federal Aviation Administration regulation to address helicopter operations. Once the CBJ determines the appropriate measures to address the helicopter noise issue, it may be necessary to amend this decision. Numbers of landings allowed by the Forest Service could then be meshed with any constraints established to limit noise impacts to residents. If the CBJ determines higher levels of helicopter activity are acceptable, the Forest Service would amend this decision to increase landings up to the levels proposed in Alternative B.

#### RATIONALE FOR THE DECISION

Alternative G was selected because it best addresses the issues identified during scoping and comments received concerning the DEIS. While some alternatives might better address certain issues, the Preferred Alternative provides the best mix for addressing them at an acceptable level.

The physical effects of the helicopter landing tours on the icefield is negligible. The main effect to National Forest System lands would be from alternatives that open new areas to landings. Under the preferred alternative, the existing closed areas are still closed to commercial land tours. Due to our concern for impacts to wildlife and independent recreation visitors. I have decided to retain the zones that are closed to helicopter glacier tours. By eliminating alternatives with landings in areas that are currently closed to landings, only Alternatives C and G are left to select from. Alternative C - Authorize Current Level of Landings Through 1999 would authorize landings far below the projected demand. The shortfall could begin as early as 1995. While this would minimize impacts to people and resources it would not provide an adequate balance of meeting demand for the tours. Selection of Alternative G will provide a balance which will provide for continuing helicopter landings at a lower than requested level.

The sound study, conducted to measure the effects of helicopter noise from helicopter traffic to the Juneau Icefield, determined that sound levels from helicopter noise were not high enough, nor of long enough duration to pose a threat to hearing safety for either humans or animals. This sound study concluded that the only acoustic impact to humans from helicopter sounds is that of annoyance to people who reside or recreate in areas close to the helicopter flight paths. It is recognized that any increase in helicopter traffic will likely increase the percent of the population highly annoyed by helicopter noise. This percent will likely remain low at the Mid-level of use authorized by this alternative as indicated by the level measured in the June, 1992 sound study.

Through the Forest Service sound study, we collected information for this EIS as is required by the CEQ regulations. While we quantified the noise level and the physical effects, we recognize that controversy still exists over the social effects from the sound generated by the helicopters. The subjective element of these social effects are not within the purview of the Forest Service. We do not have the ability or authority to collect the data concerning social effects beyond what we can measure by the sound study. I have decided

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to authorize only a moderate increase in the helicopter glacier tours until the social effects have been addressed by the City and Borough of Juneau, who has jurisdiction over this issue. I concur with the Federal Aviation Administration's recommendation to the CBJ that they initiate a complete Federal Aviation Regulation (FAR) Part 150, Airport Noise Compatibility Planning Study, which would include helicopter operations (please see Comment 59.3 in Appendix A).

Alternative A - No Action does not meet the purpose and need for meeting current public demand for access to remote locations on the Juneau Icefield. I recognize that, without the authorization of special use permits for landings on the Icefield, flightseeing could occur up to the levels of public demand.

Alternative B - Proposed Action, would lead to increased impact to residents and forest users. While there would be no direct safety hazards from the sound generated from the increased flights, the annoyance level would increase. This alternative would also allow landings in Eagle Glacier, Twin Glacier, and Death Valley Zones of the Icefield. This would increase impacts to recreation visitors and wildlife by allowing commercial glacier tour landings in areas where there are currently none authorized.

Alternative C - Authorize Current Level of Landings Through 1999, would authorize landings at current demand but would fall below projected demand. The shortfall could begin as early as 1995. While this would not increase impacts to people and resources it would also not provide for a balance of meeting projected demand for the tours.

Alternative D - Authorize Mid-level Number of Landings Through 1999, while this alternative would authorize a Mid-level number of flights, it would increase the number of flights per day because the operators would have to fly more flights per day to make up for the one weekend day per week they would not be allowed landings. On this weekend day without flights, flightseeing tours could continue at unregulated numbers. This alternative would also allow landings, and the associated noise impact, in areas of the Icefield that currently have no commercial glacier tour landings (Eagle Glacier, Twin Glacier, and Death Valley Zones).

Alternative E - Satellite Heliport has the greatest potential for impacts to wildlife since flights would likely be over areas that currently have few or no commercial glacier tour flights. This alternative would also impact recreation users by increasing flights over popular hiking trails and remote areas. This alternative would also allow landings, and the associated noise impact, in areas of the icefield that currently have no commercial glacier tour landings, Eagle Glacier, Twin Glacier, and Death Valley Zones.

Alternative F - 1999 Level With Limited Hours and Days would be similar to Alternative C and would also allow landings in areas of the Icefield that currently have no commercial glacier tour landings, Eagle Glacier, Twin Glacier, and Death Valley Zones. As with the other alternatives that have one weekend day a week without landings, flightseeing tours could continue on that day at unregulated numbers.

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#### PUBLIC INVOLVEMENT

Public involvement from the 1987 and 1992 Environmental Assessments and 1992 Appeal were reviewed and used in the preparation of this EIS. In 1991 and 1992, the Forest Service requested input on helicopter glacier tours by mailing letters and placing a paid advertisement in the Juneau Empire. A total of 17 letters, 21 telephone calls, and 3 visits were received in response to this request for input.

In early 1994, the Forest Service began scoping for this environmental impact statement by mailing letters and placing a paid advertisement in the Juneau Empire. A total of 35 letters, 17 telephone calls and 1 visit were received in response to this request for input. On October 21, 1994, the Notice of Intent was published in the Federal Register. The Draft EIS was mailed to the public the week of November 21, 1994. The comment period ended on January 20, 1995. Ninety-four comment letters were received on the Draft EIS and used to develop the Final EIS.

#### MITIGATION AND MONITORING

The FEIS identifies mitigation measures that are designed to ensure that all practicable means have been adopted to avoid or minimize potential environmental impacts from the selected alternative during the term of the special use permits. Chapter 2, Mitigation, lists the mitigation measures common to all alternatives. These mitigation measures, developed in conjunction with the Fish and Wildlife Service and Alaska Department of Fish and Game, are considered to be effective, and are made a part of this decision. As noted in the FEIS, I have decided not to implement Mitigation #1 from the DEIS.

Monitoring will determine compliance of the project with the terms of the special use permit and validate projected environmental effects of the project.

#### FINDINGS REQUIRED BY OTHER LAWS

#### Tongass Land Management Plan, as Amended

This decision is consistent with the Tongass Land Management Plan, as amended. The site is located in Management Areas C04, C05, C06, C07, and C09, which have been assigned Land Use Designation (LUD) II and LUD III. Emphasis for management in the LUD II areas are for major activities to be oriented toward management in a roadless state to retain their wildland character. Need for public access is emphasized. LUD III lands are to be managed for a variety of uses and activities in a compatible manner to provide the greatest combination of benefits. The major activity emphasis in C04 is public safety and research, C05 is dispersed recreation, C06 is high developed and dispersed recreation use and potential for increase, and C07 is toward recreational and aesthetic development, enhancement and maintenance.

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#### ANILCA Section 810, Subsistence Evaluation and Finding

The effects of this project have been evaluated to determine potential effects on subsistence opportunities and resources. There is no documented or reported subsistence use that would be restricted as a result of this decision.

#### Coastal Zone Management Act of 1972, as amended

The Coastal Zone Management Act requires the Forest Service, when conducting or authorizing activities or undertaking development directly affecting the coastal zone, to insure that the activities or development be consistent with the approved Alaska Coastal Management Program to the maximum extent practicable. I have determined that the proposed activities are consistent with the Alaska Coastal Management Program to the maximum extent practicable.

#### **Endangered Species Act of 1973**

A biological evaluation has been completed for this action which indicates that no Federally listed threatened or endangered species will be affected by this decision.

#### **National Historic Preservation Act of 1966**

The Forest Service program for compliance with the National Historic Preservation Act includes locating, inventorying and nominating all cultural sites that may be directly or indirectly affected by scheduled activities. This activity has been reviewed by a qualified archeologist and a determination made that no known cultural resources are present in the project area.

#### Floodplain Management (E.O. 11988), Protection of Wetlands (E.O. 11990)

This activity is not located within a floodplain as defined by Executive Order 11988 and is not located within wetlands as defined in Executive Order 11990.

#### **IMPLEMENTATION DATE**

Implementation of decisions made by the Juneau District Ranger, which are subject to appeal pursuant to 36 CFR part 215, may occur on, but not before, five (5) business days from the close of the appeal filing period. The appeal filing period closes forty-five (45) days after publication of legal notice of this decision in the Juneau Empire newspaper, published in Juneau, Alaska.

#### RIGHT TO APPEAL OR ADMINISTRATIVE REVIEW

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. A written notice of appeal must be filed with the Appeal Deciding Officer:

Phil Janik, Regional Forester Regional Office P.O. Box 21628 Juneau, Alaska 99802-1628

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The Notice of Appeal must be filed within forty-five (45) days of publication of notice of this decision in the Juneau Empire.

In accordance with 36 CFR Section 215.14, it is the responsibility of those who appeal a decision to provide the Appeal Deciding Officer sufficient evidence and rationale to show why the Responsible Official's decision should be remanded or reversed. The written notice of appeal filed must meet the following requirements:

- State that the document is a Notice of Appeal filed pursuant to 36 CFR part 215. 1.
- List the name, address, and telephone number of appellant; 2.
- 3. Identify the decision document by title and subject, date of the decision, and name and title of the Responsible Official;
- Identify the specific change(s) in the decision that the appellant seeks or portion of the decision to 4. which the appellant objects;
- 5. State how the Responsible Official's decision fails to consider comments previously provided and, if applicable, how the appellant believes the decision violates law, regulation, or policy and, if applicable, specifically how the decision violates the law, regulation, or policy.

#### CONTACT PERSON

John H. Favro Recreation/Lands Staff Officer Juneau Ranger District (907) 586-8800

E. mitchell

District Ranger

3-17-95

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Appendix B: List of Agencies, Organizations, and Persons Receiving Copies of the Final EIS

The United States Department of Agriculture (USDA) Forest Service is a diverse organization committed to equal opportunity in employment and program delivery. USDA prohibits discrimination on the basis of race, color, national origin, sex, religion, age, disability, political affiliation and familial status. Persons believing they have been discriminated against should contact the Secretary, United States Department of Agriculture, Washington, DC 20250, or call 202-720-7327 (voice), or 202-720-1127 (TTY).







#### SUMMARY

This Final Environmental Impact Statement (FEIS) is written in response to applications received from three helicopter companies who want to provide helicopter landing tours on and immediately adjacent to the Juneau Icefield Juneau, Alaska. The Forest Service will use the Final EIS to support a decision on whether or not to issue special use permits for helicopter landing tours, the use levels to be authorized, and mitigation measures to be added to the permit.

#### **PURPOSE AND NEED**

Permits for helicopter landing tours, which were first issued in 1984 for all three companies expired at the end of 1994. The applications for five-year permits are for increased use over the 1994 level. The purpose and need for the proposal is to meet public demand for quality guided services which provide safe helicopter access to remote locations on the Juneau Icefield. The proposed action is to authorize helicopter landings on the Juneau Icefield as requested on applications submitted by Temsco Helicopters, Inc., Coastal Helicopters, Inc., and Era Helicopters, Inc. Permits would be issued to each of the helicopter companies for five years, which would authorize a peak total of 22,221 landings in 1999.

## ALTERNATIVES INCLUDING THE PROPOSED ACTION

Seven alternatives, including the Proposed Action and No Action alternatives were considered.

#### Alternative A - No Action

Alternative A would not authorize landings on the icefield. Flightseeing tours with no landings could continue but would be outside the jurisdiction of the Forest Service.

#### Alternative B - Proposed Action

Alternative B would issue five- year permits as requested by the operators. By 1999, Temsco would be authorized 12,663 landings; Coastal would be authorized 525 landings; and Era would be authorized 9,033 landings. The daily landing times at the icefield would be limited to between 8:30 a.m. and 8 p.m.

#### Alternative C – Authorize Current Level of Landings Through 1999

Alternative C would limit the helicopter tour landings to the same level as was approved for 1994. By 1999, Temsco would be authorized 7,587 landings; Coastal would be authorized 57 landings; and Era would be authorized 4,003 landings. This alternative would not allow landings on Zone 2–Eagle Glacier, Zone 6–Death Valley, and Zone 9–Twin Glacier.

#### Alternative D – Authorize Mid-level Number of Landings Through 1999

Alternative D would authorize additional helicopter landings through 1997, after which authorized landings would remain at the 1997 level. By 1999, Temsco would be authorized 11,172 landings, Coastal would be authorized 326 landings, and Era would be authorized 7,541 landings. In addition, the helicopter landing tours would not be allowed on one weekend day each week and the three summer holidays. The daily landing times at the icefield would be limited to between 9 a.m. and 7 p.m.

#### Alternative E - Satellite Heliport

Alternative E would be similar to Alternative B – Proposed Action except that a new satellite heliport for flights over Mendenhall Valley would be located between miles 25 and 28 on the Glacier Highway.

## Alternative F – 1994 Level with Limited Hours and Days

Alternative F would be similar to Alternative C (Authorize current level of landings through 1999) with the additional restriction of limiting landings of all tours at the icefield to the hours of 9 a.m. through 6 p.m. Also landing tours would not be allowed one weekend day each week nor on holidays.

#### Alternative G-Authorize Mid- level Number of Landings Through 1999 With Landing-Free Zones

Alternative G would authorize additional helicopter landings through 1997, after which authorized landings would remain at the 1997 level. By 1999, Temsco would be authorized 11,172 landings; Coastal would be authorized 326 landings; and Era would be authorized 7,541 landings. In addition, no landing tours would be authorized in Zone 2–Eagle Glacier, Zone 6–Death Valley, and Zone 9–Twin Glacier. Landings would be allowed from 8:30 a.m. to 8 p.m.daily.

#### **AFFECTED ENVIRONMENT**

The Federal Aviation Administration has control over aircraft in the Airport Influence Zone which is a three-nautical-mile radius around the airport. The City and Borough of Juneau is the agency responsible for managing noise within the Airport Influence Zone. In 1993, meaurement was made by the Forest Service of helicopter sound and the ambient background sound. The measurement was at twelve locations throughout Juneau to aid in the assessment of the sound impact of helicopter tours. This study compares the equivalent sound level (Leq) of the background or ambient sound to the level including the contribution of the sound from the helicopter landing tour operations.

The Mendenhall Glacier Recreation Area (MGRA) is an area designated by the Forest Service for public recreation use. This area is located in the northern portion of the Mendenhall Valley and includes the Mendenhall Glacier Visitor Center, Mendenhall Glacier Campground, Skater's Cabin Day-Use Site, and Dredge Lakes Area.

The following trails, both inside and outside the MGRA, are within the area of helicopter tours: West Glacier Trail, Trail of the Glacier, East Glacier Trail, Steep Creek Trail, Moraine Ecology Trail, Dredge Lakes Area trails, Nugget Creek Trail, Heintzleman Ridge Trail, Montana Creek Trail, Auk Nu Trail, Spaulding Meadows Trail, Herbert Glacier Trail, Amalga Trail, Windfall Trail, Peterson Lake Trail, Mount McGinnis Path, Sheep Creek Trail, Granite Creek Trail, Perserverance Trail, Lemon Creek Trail, Salmon Creek Trail and Road, Point Bishop Trail, and Blackerby Ridge.

The area of analysis for wildlife resources includes the Juneau Icefield and the helicopter flight paths used to reach the icefield. Wildlife concerns focus mainly on mountain goats. Other species found in this area include black and brown bears, wolverine, wolves, trumpeter swans, beaver, songbirds, waterfowl, river otters, raptors, owls, bald eagles, and moose.

## **ENVIRONMENTAL**CONSEQUENCES

Effects to the Juneau Icefield would be minor from the helicopter landing tours. Landing on snow and ice does not create adverse impacts.

#### Issue 1 - Noise to Residential Areas

The Forest Service Sound Study (Forest Service, 1994a) concluded that the sound levels from the helicopters do not pose a threat to hearing safety for either humans or animals. Therefore, the only acoustic impact resulting from the helicopter sounds is that of annoyance to people who reside in areas close to the helicopter flight paths. The overall impact, as gauged by an increase on the annoyance-percentage graph is low for most of the measurement sites. Even the sites with a larger difference between the background and combined levels still had overall sound levels that rated

relatively low on the annoyance percentage relationship graph.

Depending upon the continued demand for helicopter tours (both landing and flightseeing tours), there may be little difference in the effects generated by any alternative. The effects of helicopter overflights to and from the icefield landing sites are the same regardless of whether the helicopters land or remain airborne; however, the number of overflights increases the frequency of disturbance. For alternatives which constrain or limit the number of icefield landings, helicopter companies, in order to meet demand, have the option of continuing to market helicopter rides as flightseeing tours using the same flight paths as landing tours. Assuming the demand is being met, the same number of helicopters could be creating the same effect on residents, recreationists, and wildlife under all alternatives, including the No Action Alternative.

## Issue 2 – Disturbance to Ground-Based Recreation Users

The effect of helicopters traveling in areas in the vicinity of ground-based recreation activities is the interruption of solitude caused by the noise of the aircraft. The level of annoyance would be higher in areas of more solitude and lower in high-use areas such as the Mendenhall Glacier Visitor Center.

All alternatives, except Alternative E - Satellite Heliport, would affect West Glacier Trail, Trail of the Glacier, East Glacier Trail, Steep Creek Trail, Moraine Ecology Trail, Dredge Lakes Area trails, Nugget Creek Trail, Heintzleman Ridge Trail, Montana Creek Trail, Auk Nu Trail, Spauldings Meadows Trail, Mendenhall Glacier Visitor Center, Skater's Cabin, Steep Creek Area, Herbert Glacier Trail, Amalga Trail, Windfall Trail, Peterson Lake Trail, Mount McGinnis Path, Sheep Creek Trail, Granite Creek Trail, Perserverance Trail, Lemon Creek Trail, Salmon Creek Trail and Road, Point Bishop Trail, and Blackerby Ridge. The effects would be the same, but the frequency of effects

would vary by alternative, with the alternatives with more landings having more frequency.

Alternatve E - Satellite, would have flights from a satellite heliport out Glacier Highway between miles 25 and 28. The trails and recreation sites affected helicopter flight paths from a heliport in this area would be Peterson Lake Trail, Herbert Glacier Trail, Amalga Trail, Eagle Beach, Windfall Trail, and Eagle Glacier Cabin.

#### Issue 3 - Wildlife

The effect of helicopters traveling in areas in the vicinity of wildlife is the disturbance to them caused by the noise of the aircraft. Wildlife concerns focus primarily on mountain goats. However, other species are also of concern. Increases in areas where past helicopter use has been low (such as Gilkey Glacier, Eagle Glacier, Death Valley, Twin Glacier, and Herbert Glacier), would likely result in the highest impact to mountain goats and other wildlife. In areas where helicopter use has been high (such as Mendenhall Glacier) mountain goats have become habituated to helicopters and are not likely to experience additional impacts.

The effects of landings from all alternatives, except Alternative E - Satellite Heliport, would be the same, but the frequency of effects would vary by alternative, with the alternatives with more landings having more frequency.

Alternative E – Satellite Heliport would cause new helicopter travel in an area which currently experiences low use. This would impact brown bear, wolves, songbirds, river otter, marten, raptors, and wolverine in the Eagle and Herbert River corridor because of the increase in helicopter noise in this area. Mountain goats in the alpine areas would also experience an increase in helicopter noise and could be negatively impacted.







## CHAPTER 1 PURPOSE OF AND NEED FOR ACTION

#### A. INTRODUCTION

The Juneau Ranger District has received applications from three helicopter companies who wish to provide helicopter landing tours on and immediately adjacent to the Juneau Icefield, Juneau, Alaska. Temsco Helicopters, Inc. (Temsco), Coastal Helicopters, Inc. (Coastal) and Era Helicopters, Inc. (Era), are requesting to renew the special use permits under which they are currently operating, with an increase in helicopter landings. All three of these permits expired December 31, 1994.

The proposed helicopter landing tours consist of a thirty- to ninety-minute trip in a helicopter from a heliport near sea level to a glacier in the Juneau Icefield. The helicopter lands so passengers can walk on the glacier in the vicinity of the helicopter with a guide who describes glacial phenomena. Tour companies, who transport large numbers of passengers, minimize helicopter costs by dropping off new passengers on the icefield and immediately loading earlier passengers for the return trip to the heliport. Most tours are offered between April and September.

Besides the Forest Service, helicopter tours fall under several other agencies' jurisdiction. These agencies include the Federal Aviation Administration, the City and Borough of Juneau, the Alaska Department of Fish and Game, and the U.S. Fish and Wildlife Service. These jurisdictions are described under the heading "Other Laws and Permits."

The three glacier-tour helicopter companies operating in Juneau have the following helibases: Temsco helibase is located at the northeast end of the Juneau Airport runway; Coastal helibase is near the center of the runway on the northeast side; Era helibase is on the west

side of Gastineau Channel at approximately mile 4 on North Douglas Highway.

#### Background: 1984

In 1984 the Juneau Ranger District authorized Temsco to conduct landing tours on the Mendenhall Glacier. This glacier is part of the Juneau Icefield and is immediately adjacent to the valley community of Juneau. Since that time, Temsco has developed its tour into a highly successful business marketed principally through tour ships visiting Juneau.

#### Background: 1987

In 1987, the Juneau Ranger District received four applications for new helicopter landing tour operations. These were from: M&M Enterprises, LAB Airlines, Era/Livingston Helicopters, and Temsco Helicopters. An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Management Guidelines for Helicopter Landing Tours on the Juneau Icefield was completed and a decision signed on March 9, 1987 (USDA Forest Service, 1987). As a result of the decision, a prospectus for bids for new helicopter landing tours was offered in March of 1987. Temsco and Era were issued permits as a result of submitting proposals on the bid offerings and receiving the awarded use.

In the 1987 Environmental Assessment, the study area was divided into ten management zones based on landforms and human use patterns. These zones will be used for this analysis with modification of the Twin Glacier

Zone to include Wright Glacier. This area is described in Map 1<sup>1</sup>, Icefield Zones.

#### Background: 1989

In March 1989, Temsco requested an increase in the number of landings allowed on the Mendenhall Glacier from 5,063 landings to 7,595 landings (based on 3.95 passengers per helicopter). This request was approved by the Juneau District Ranger in March 1989 (USDA Forest Service, 1989). This decision was based on the success of Temsco in reducing noise levels by phasing in quieter A-Star helicopters, increasing the number of passengers carried per helicopter, changing flight routes, and increasing altitudes flown. The actual number of landings Temsco had on Mendenhall Glacier in 1989 was 5,913.

#### Background: 1992

A letter of agreement, signed on March 23, 1992, (FAA, 1992) established procedures for helicopter operations in the Juneau Traffic Area of the Juneau Airport. This agreement included the Juneau Airport Traffic Control Tower (ATCT), Coastal Helicopters, Silver Bay Logging, Temsco and U.S. Army National Guard. All helicopter operations by the parties to this letter are required to comply with the procedures agreed to unless specific approval to deviate has been given by Juneau ATCT. This analysis assumes the agreement will remain in place. The procedures that apply to the helicopter landing tours are:

1. Altitudes. Recommended altitudes south of the airport are at or below 500' above ground level (AGL) (for separation from fixed wing aircraft) and north of the airport are at or above 1,500' AGL (for noise abatement). Although

<sup>1</sup>All maps referred to are located at the end of this document.

these altitudes are not mandatory, any helicopter not in accordance with them shall advise Juneau ATCT of its altitude.

# 2. Montana Creek/Mendenhall Departure. Helicopters shall fly westbound over or south of the Egan Expressway, fly to the Mendenhall River, then north toward Montana Creek or Mendenhall Lake. In the event of inbound traffic to the runway on an arrival route from the north, ATCT may issue an altitude restriction of at or below 700' mean sea level (MSL) until abeam (at right angles to) the approach end of runway 8. Southbound traffic will be at or above 1000' MSL.

3. Lemon Creek Departure. Helicopters shall fly westbound no farther than the Ward Air hanger then north bound over Heintzleman Ridge.

On July 17, 1992, following preparation of another environmental assessment and FONSI, the Juneau District Ranger signed a decision notice allowing authorization for helicopter glacier landing tours for up to five years to Temsco and Coastal (USDA Forest Service, 1992a). This decision authorized approximately 6,248 landings per year on Mendenhall Glacier (based on 5.37 passengers per helicopter). Helicopter landings on other areas of the Juneau Icefield were the same as approved in the 1987 environmental assessment. The decision was appealed.

#### Background: 1993

The Regional Forester, Alaska Region, following a review of the appeal, concluded that the Appeal Record was incomplete and that it did not adequately support the District Ranger's, decision and he reversed the District Ranger's decision (USDA Forest Service, 1993).

In 1993, Temsco and Coastal both applied for the remaining unassigned 56 landings on the Herbert Glacier under the 1987 Environmental Assessment. By following a prospectus and bid process, the Forest Service assigned Temsco the remaining 56 landings for a total of 502 landings on the Herbert Glacier, based on their average landings in 1990 and 1991. This was consistent with the Forest Service Special Uses Handbook 2709 direction for assigning priority and temporary use (USDA Forest Service, 1992c).

Between June 17, 1993 and June 23, 1993, measurements of helicopter sound and the ambient background sound were made at twelve locations throughout the Juneau area by the Forest Service to help in the assessment of the sound impact of helicopter landing tours (USDA Forest Service, 1994a) These measurements were recorded on tape and analyzed in the laboratory to allow comparisons of the overall environmental sound levels with and without the helicopter sound present. The main focus of these measurements was on the helicopter sound impact to local residents. The method used in this study compares the equivalent sound level (Leq) of the background or ambient sound to the level including the contribution of the sound from the helicopter landing tour operations. This allows the helicopter landing tour activities' contribution to the total sound level for that time period to be quantified for comparison purposes.

#### Background: 1994

For the summer of 1994, permits were issued for all three helicopter companies under the 1987 Environmental Assessment. These permits expired December 31, 1994. All three companies have applied for new five-year permits with increased use. These applications, and the existing permits, involve landing sites on most glaciers of the Juneau Icefield. For 1994, Temsco had 7,587 permitted landings; Coastal had 57; and Era had 4,003 for a total of 11,647 permitted landings on the Juneau Icefield. See Tables 2-1, 2-2, 2-3, and 2-4.

#### **B. PURPOSE AND NEED**

The purpose and need for the proposed action is to meet current public demand for quality guided services which provide safe helicopter access to remote locations on the Juneau Icefield. Meeting this demand includes providing for visitor safety and an appropriate balance between commercial, guided recreation opportunities and non-commercial, non-guided recreation opportunities while minimizing impacts to people and resources.

#### C. PROPOSED ACTION

The Forest Service proposes to authorize helicopter landings on the Juneau Icefield as requested on applications submitted by Temsco, Coastal, and Era. These three applications are for a total of 22,221 (Table 2-4) landings and comprise the proposed action for this environmental impact statement.

Temsco. Temsco has applied for a five-year permit for helicopter landing tours on Mendenhall, Herbert, Taku, Norris, Lemon, Twin, and Gilkey Glaciers as well as various locations in the Backcountry Zone, shown on Map 2: Temsco's Routes and Landing Site Proposal. Temsco has been permitted to land on these sites in previous years. Temsco also has a designated reserved site on Mendenhall Glacier where they are permitted to place a small shelter and a porta-potty. For 1999, Temsco is proposing a maximum of 12,663 landings (based on 5.37 passengers per helicopter) (Table 2-1).

Temsco offers two separate tours. The Glacier Explorer Tour includes two landings and, weather permitting, flies from Temsco's heliport west to the ferry terminal then north to the Icefield. After landing on two different glaciers, the helicopters return to their heliport via the

same route or either through the Lemon Creek area or Taku Inlet then up Gastineau Channel. This tour consists of one or two helicopters flying together with approximately one and one-half hours between tours for up to eight tours per day. Map 2, Temsco's Routes and Landing Site Proposal, shows the flight paths of the Glacier Explorer Tour. Some of Temsco's Glacier Explorer tours also depart to the east, flying along Douglas Island and follow the same routes as Era, up Sheep Creek or around Point Bishop. Return route for Temsco is via Lemon Creek Glacier or from the west.

Temsco also offers the Mendenhall Glacier Tour, which flies from their heliport to the Mendenhall Glacier. This tour generally consists of five helicopters in a group flying every 25 minutes. Their preferred route, weather permitting, is up Heintzleman Ridge and back. However, with low cloud ceilings, the route is either up the west side of the Mendenhall Valley over Back Loop Road or over Auke Bay and up the eastern edge of Auke Mountain to Mendenhall Glacier. Of these two latter routes, the route up the eastern edge of Auke Mountain is Temsco's preferred route because it is less impacting to the residents of Mendenhall Valley. If weather permits, this route is flown first, with the Mendenhall Valley route the last choice. Map 2 shows all three routes.

Coastal. Coastal has applied for a five-year permit for helicopter landing tours on Gilkey, Eagle, Herbert, and Taku Glaciers as well as various locations in the Backcountry Zone, shown on Map 3: Coastal's Routes and Landing Sites Proposal. Coastal has been permitted to land on Gilkey and Taku Glaciers in previous years. For 1999, Coastal is proposing 525 landings (based on four passengers per helicopter) (Table 2-2). Coastal usually has a single helicopter conducting tours, but occasionally they will fly a group of two helicopters. (Map 3.)

Era. Era helicopters has applied for a five-year permit for helicopter landing tours on Gilkey, Lemon, Norris, Taku, and Twin Glaciers as well as portions of the Backcountry Zone and the Death Valley Zone (Era, 1993). Era has been permitted to land on Norris, Taku, and Lemon Glaciers in previous years. For 1999, Era is proposing 9,033 landings (based on 5.37 passengers per helicopter) (Map 4; Table 2-3).

Era's tours leave their heliport on the west side of Gastineau Channel, fly up Sheep Creek to Norris Glacier and return via Salmon Creek. Era leaves every 30 minutes with two tours with four helicopters in each tour. Map 4, Era's Routes and Landing Sites Proposal, shows Era's flight paths.

#### D. DECISION TO BE MADE

The District Ranger, Juneau Ranger District, is the official responsible for authorizing the special use permits that have been requested. The decision to be made is whether or not to issue special use permits for helicopter landing tours as requested or at different levels. The District Ranger will also determine any mitigation measures that will be required.

#### E. SCOPING

In addition to the public involvement described below, public involvement from the 1987 and 1992 environmental assessments and the 1992 appeal were reviewed. In 1991 and 1992, during preparation of the environmental assessment, the Forest Service requested input on helicopter glacier tours proposed actions by:

- 1. Mailing letters to 24 individuals.
- 2. Placing a paid advertisement in the *Juneau Empire* for six days from December 13, 1991 through January 17, 1992.

A total of 17 letters, 21 telephone calls, and 3 visits were received in response to this request for input.

In 1994, the Forest Service requested input on the proposed action by:

- 1. Mailing letters to 31 individuals, organizations, and agencies.
- 2. Placing a paid advertisement in the *Juneau Empire* for three days: May 20, 25 and 29, 1994.
- 3. Requesting input from Forest Service staff and specialists.

A total of 35 letters, 17 telephone calls, and 1 visit were received in response to the request for input.

In December 1994, the DEIS was mailed to 160 individuals, organizations, and agencies and 150 were handed out at the Juneau Ranger District Office. A total of 115 responses were received (see Appendix A.)

#### F. SIGNIFICANT ISSUES

The following issues were identified during scoping:

Issue 1. The noise that helicopters make during these flights could impact the quality of life for residents in the Mendenhall Valley, Fred Meyer, Auke Lake, Juneau Airport, and Lemon Creek Areas. Components of this issue are: too many trips, flights occur too frequently, altitude of flights is too low, too many helicopters fly together in one group, flight paths are not acceptable, helicopters start flying too early and end too late in the day and there is no day of the week in which the helicopter landing tours do not fly.

Issue 2. These flights could cause noise disturbance to ground-based recreation users of the Mendenhall Glacier Recreation Area, Montana Creek Trail, Heintzleman Ridge Trail, Spaulding Meadows Trail, Auk Nu Trail, Salmon Creek Road, the Mendenhall Glacier Visitor Center, the Mendenhall Glacier Campground and Skaters Cabin-both on and off Forest Service managed land. Responses to scoping indicate that some people feel that while they are involved in a recreational activity, hearing helicopters is a negative impact to their recreation experience.

Issue 3. Helicopter tours could impact wildlife. Concerns were expressed that helicopter tours could stress wildlife species, particularly mountain goats, bears, and bald eagles located in the vicinity of Heintzleman Ridge, Mount McGinnis, Bullard Mountain, Auke Mountain, and Thunder Mountain. The concern is that the stress from helicopter activity would cause abandonment of habitat or long term deterioration of health. The primary concern is that wildlife may be negatively affected by the noise and sightings of helicopters.

## G. Existing Management Direction

The Tongass Land Management Plan (TLMP), as amended (USDA Forest Service, 1986, 1991), provides the land management direction for the Tongass National Forest. TLMP assigns to the Juneau Icefield two land use designations (LUDs). The majority of the backcountry icefield falls into LUD II - lands that are to be managed in a roadless state to retain their wildland character. This designation permits primitive recreational facility development but excludes roads, and major concentrated recreational facilities. A large portion of the icefield was added to the Tongass National Forest by ANILCA in December 1980 and is

unclassified and without management direction. That parcel is surrounded to the south and west by LUD II lands and to the north and east by the international boundary. The major activity emphasis for this area is toward continuance of cooperative efforts with research groups studying the Juneau Icefield and glaciers. Need for public access is also emphasized.

The remainder of the study area is assigned LUD III. These lands are to be managed for a variety of uses with emphasis on managing for uses and activities in a compatible and complementary manner to provide the greatest combination of benefits. These lands may include concentrated recreational developments. The management area that includes the face of Mendenhall Glacier, Mendenhall Glacier Recreation Area, Auke Mountain, and north to the Eagle and Herbert Glacier drainages is to be managed with a LUD III emphasis. The major activity emphasis is toward recreational and aesthetic development, enhancement and maintenance.

The Alaska Regional Guide (USDA Forest Service, 1983) is a document which provides national and regional direction to the Tongass National Forest and the Chugach National Forest for land and resource planning and management. According to the Alaska Regional Guide, the Forest Service will provide a broad spectrum of recreation opportunities in accordance with identified needs and demands.

The intent of this policy, as provided in the *Alaska Regional Guide*, is to encourage development of all types of potential services within the private sector to meet a variety of public demands. In some cases, various services may not be mutually compatible.

Specific Forest Service policies and land management direction which apply to this analysis are:

- Provide a broad spectrum of recreation opportunities in accordance with identified needs and demands. Alaska Regional Guide, November 1983 (USDA Forest Service, 1983), and Tongass Land Management Plan, as amended (USDA Forest Service, 1986, 1991).
- 2. Give priority consideration to recreation opportunities now being actively utilized by the public for recreation pursuits. *Alaska Regional Guide*, (USDA Forest Service 1983).
- 3. Encourage dispersed recreational use. Tongass Land Management Plan, Direction for recreation use in the Juneau Icefield area (USDA Forest Service 1986, 1991).
- 4. Encourage private land and capital to develop services and accommodations to meet public demands. *Alaska Regional Guide* (USDA Forest Service 1983).
- 5. Forest Service Manual 2721.03 states:
  "Issue and administer special use permits for recreation uses that serve the public, promote public health and safety, and protect the environment" (USDA Forest Service, 1992d).
- 6. Forest Service Handbook 2709 states: "Encourage skilled and experienced individuals, organizations, and companies to conduct outfitting and guiding activities in a manner that assures national forest visitors receive services of high quality" (USDA Forest Service, 1992c).

#### H. OTHER LAWS AND PERMITS

#### **Federal Aviation Administration**

The Federal Aviation Administration, in cooperation with the City and Borough of Juneau, is the agency responsible for all aircraft travel within the influence zone of the Juneau Airport. FAA is the agency responsible for all aircraft travel in uncontrolled airspace.

The Code of Federal Regulations for the Federal Aviation Administration and Department of Transportation Volume 14, Chapter 1, Part 135.203 states:

"Except when necessary for takeoff and landing, no person may operate under visual flight rules (VFR) a helicopter over a congested area at an altitude less than 300 feet above the surface."

Only commercial helicopters have this 300-foot above-ground-level restriction. If a helicopter is not carrying passengers for compensation or hire, then they fall under the rules of Federal Aviation Regulation (FAR) 91.119 which states that helicopters may be operated at less than the minimums if the operation is conducted without hazard to persons or property on the surface.

The Flight Standards Division of the FAA is responsible for all flight operations whether in controlled or uncontrolled air space. Issues such as flight safety in uncontrolled areas of the Juneau Icefield come under the jurisdiction of the FAA. In addition to the 300-foot rule cited above, the FAA has also issued an Advisory Circular AC91.36C dated March 19, 1982 that recommends 2,000 feet over noise sensitive areas.

The Juneau Air Traffic Control Tower, under the jurisdiction of the FAA, has authority over aircraft movements in the airspace it is responsible for (a three-nautical-mile radius of the airport up to 2500 feet Above Ground Level (FAA, 1994)).

#### City and Borough of Juneau

The City and Borough of Juneau (CBJ) is the proprietor of the Juneau International Airport and the agency responsible for regulating noise in residential areas. Airports are responsible for controlling aircraft noise and mitigating its effects in the immediate vicinity of airports (Alaska State Legislature, 1993).

CBJ does not have an aircraft noise regulation in place, however, there is a CBJ ordinance (42.20.095) of Disturbing the Peace defined as doing any of the following actions:

"Between the hours of eleven p.m. and seven a.m. operate or use a pile driver, pneumatic hammer, bulldozer, road grader, loader, power shovel, derrick, backhoe, power saw, manual hammer, motorcycle, appliance, or vehicle which generates an unreasonably loud noise, after having been informed by another that such operation or use is disturbing or is likely to disturb the peace or privacy of others."

CBJ has not enforced this ordinance for helicopters. The hours described above are generally outside the hours in which helicopter glacier landing tours occur.

#### U.S. Fish & Wildlife Service

The U.S. Fish and Wildlife Service administers the Endangered Species Act, as re-authorized in 1982, and the Bald Eagle Protection Act of 1940, as amended. The Forest Service must consult with the U.S. Fish and Wildlife Service regarding any threatened or endangered species that might be impacted by the proposed action

or alternatives. If any impacts are projected, measures to protect the species must be developed.

#### Alaska Department of Fish & Game

Alaska Department of Fish and Game provides comments and recommendations to federal agencies via the Fish and Wildlife Coordination Act (16 USDF 66, et seq.).

#### Alaska Administrative Code

Section 5 AAC 92.080, in pertinent part, states:

"Unlawful Methods of Taking Game; Exceptions. The following methods of taking game are prohibited: ... (5) with the use of an aircraft, snowmachine, motordriven boat, or other motorized vehicle for the purpose of driving, herding, or molesting game; ...".

This code section would be applicable to helicopter tours when they make close passes to wildlife for the purpose of viewing them.

[End of Chapter]





#### **CHAPTER 2 – ALTERNATIVES**

#### INTRODUCTION

The National Environmental Policy Act (NEPA) requires consideration of alternatives to the proposed action, which address important issues identified in the scoping process. This chapter describes and compares the proposed action and six project alternatives, including the No Action alternative. The discussion of alternatives is the foundation of the environmental impact statement (EIS) process (40 Code of Federal Regulations (CFR) 1502.14). There must be a reasonable array of alternatives that achieve the purpose for which an EIS is prepared.

## A. ALTERNATIVE A – No Action

Under the No Action Alternative, special use permits to land helicopters on the Juneau Icefield would not be issued to Temsco Helicopters, Inc., Coastal Helicopters, Inc., or Era Helicopters. Flightseeing tours are outside the jurisdiction of the Forest Service and may still occur even if no landings are authorized.

## B. ALTERNATIVE B – PROPOSED ACTION

With this alternative, special use permits would be approved through 1999 as requested by all three helicopter tour companies, with 22,221 landings approved by 1999 (Table 2-4). Landings would occur between the hours of 8:30 a.m. and 8 p.m. seven days a week from early May through late September. The associated flight paths and elevations flown are outside the jurisdiction of the Forest Service. These flight paths, shown on Maps 2-4 are based on the March 23, 1992, Letter of Agreement between helicopter operators and the Federal Aviation Administration (FAA, 1992) and are assumed to apply through 1999. The number of landings would be approved as shown on Tables 2-1, 2-2, and 2-3.

| TABLE 2-1 — MAXIMUM I              | NUMBER OF LA | RNATIVE B    | COMPANY: TEMSCO HELICOPTERS, INC. |               |               |               |
|------------------------------------|--------------|--------------|-----------------------------------|---------------|---------------|---------------|
|                                    | ACTUAL       |              |                                   | PROPOSED      |               |               |
| NAME OF GLACIER                    | 1994         | 1995         | 1996                              | 1997          | 1998          | 1999          |
| Gilkey Glacier and Backcountry     | 521          | 1,117        | 1,304                             | 1,397         | 1,490         | 1,676         |
| Herbert Glacier                    | 559          | 745          | 931                               | 1,117         | 1,304         | 1,490         |
| Mendenhall Glacier                 | 5,587        | 6,331        | 6,704                             | 7,076         | 7,449         | 7,449         |
| Lemon Glacier                      | 466          | 186          | 279                               | 279           | 186           | 186           |
| Norris Glacier                     | 189          | 279          | 372                               | 372           | 466           | 559           |
| Taku Glacier, Hole-<br>in-the Wall | 265          | 559          | 652                               | 745           | 838           | 931           |
| Twin Glacier                       | 0            | 93           | 186                               | 186           | 186           | 372           |
| Total                              | <u>7,587</u> | <u>9,310</u> | <u>10,428</u>                     | <u>11,172</u> | <u>11,919</u> | <u>12,663</u> |

| ALTERNATIVE B TABLE 2-2 – MAXIMUM NUMBER OF LANDINGS BY GLACIER COMPANY: COASTAL HELICOPTERS, INC. |           |                |            |            |            |            |  |  |
|--|-----------|----------------|------------|------------|------------|------------|--|--|
|  | ACTUAL    | CTUAL PROPOSED |            |            |            |            |  |  |
| Name of Glacier  | 1994      | 1995           | 1996       | 1997       | 1998       | 1999       |  |  |
| Gilkey Glacier and Backcountry   | 31        | 50             | 76         | 76         | 76         | 125        |  |  |
| Eagle Glacier  | 0         | 76             | 100        | 100        | 100        | 150        |  |  |
| Herbert Glacier  | 0         | 76             | 100        | 100        | 100        | 150        |  |  |
| Taku Glacier, Hole-<br>in-the Wall   | 26        | 37             | 50         | 50         | 50         | 100        |  |  |
| Total  | <u>57</u> | 239            | <u>326</u> | <u>326</u> | <u>326</u> | <u>525</u> |  |  |

| TABLE 2-3 — MAXIMUM I              | ALTERNATIVE B  TABLE 2-3 – MAXIMUM NUMBER OF LANDINGS BY GLACIER COMPANY: ERA HELICOPTERS |              |              |              |              |              |  |  |  |
|------------------------------------|---|--------------|--------------|--------------|--------------|--------------|--|--|--|
|                                    | ACTUAL  |              |              | PROPOSED     |              |              |  |  |  |
| NAME OF COMPANY                    | 1994  | 1995         | 1996         | 1997         | 1998         | 1999         |  |  |  |
| Gilkey Glacier and Backcountry     | 0   | 187          | 243          | 279          | 326          | 373          |  |  |  |
| Lemon Glacier                      | 96  | 187          | 279          | 373          | 465          | 559          |  |  |  |
| Death Valley                       | 0   | 187          | 233          | 279          | 326          | 373          |  |  |  |
| Norris Glacier                     | 3,624   | 5,261        | 5,750        | 6,239        | 6,727        | 7,216        |  |  |  |
| Taku Glacier, Hole-<br>in-the Wall | 283   | 46           | 70           | 93           | 116          | 139          |  |  |  |
| Twin Glacier                       | 0   | 187          | 233          | 278          | 326          | 373          |  |  |  |
| Total                              | <u>4,003</u>  | <u>6,055</u> | <u>6,808</u> | <u>7,541</u> | <u>8,286</u> | <u>9,033</u> |  |  |  |

| ALTERNATIVE B TABLE 2-4 - TOTAL NUMBER OF LANDINGS BY COMPANY |        |               |               |               |        |        |  |  |  |
|---|--------|---------------|---------------|---------------|--------|--------|--|--|--|
| -   | ACTUAL |               |               | PROPOSED      |        |        |  |  |  |
| NAME OF COMPANY   | 1994   | 1995          | 1996          | 1997          | 1998   | 1999   |  |  |  |
| Total: Temsco   | 7,587  | 9,310         | 10,428        | 11,172        | 11,919 | 12,663 |  |  |  |
| Total: Coastal  | 57     | 239           | 326           | 326           | 326    | 525    |  |  |  |
| Total: Era  | 4,003  | 6,055         | 6,808         | 7,541         | 8,286  | 9,033  |  |  |  |
| Total All Companies   | 11,647 | <u>15,604</u> | <u>17,562</u> | <u>19,039</u> | 20,531 | 22,221 |  |  |  |

# C. ALTERNATIVE C – AUTHORIZE CURRENT LEVEL OF LANDINGS THROUGH 1999

This alternative would limit helicopter tour landings to the same level, 11,647 (Table 2-8), as was approved for 1994. Landings would occur between the hours of 8:30 a.m. and 8 p.m. seven days a week from early May through late

September. The number of landings would be approved as shown below. This alternative would not allow any landings in the Eagle Glacier, Twin Glacier, or Death Valley Zones.

This alternative is intended to address the issues of noise over residential areas, noise and visual disturbance to ground based recreation users, and impacts to wildlife by not authorizing increased use levels at the landing sites.

| TABLE 2-5 - MAXIMUM                | NUMBER OF LA | RNATIVE C<br>ACIER | COMPANY: TEMSCO HELICOPTERS, INC. |              |              |              |
|------------------------------------|--------------|--------------------|-----------------------------------|--------------|--------------|--------------|
|                                    | ACTUAL       | ACTUAL             |                                   |              |              |              |
| Name of Glacier                    | 1994         | 1995               | 1996                              | 1997         | 1998         | 1999         |
| Gilkey Glacier and Backcountry     | 521          | 521                | 521                               | 521          | 521          | 521          |
| Herbert Glacier                    | 559          | 559                | 559                               | 559          | 559          | 559          |
| Mendenhall Glacier                 | 5,587        | 5,587              | 5,587                             | 5,587        | 5,587        | 5,587        |
| Lemon Glacier                      | 466          | 466                | 466                               | 466          | 466          | 466          |
| Norris Glacier                     | 189          | 189                | 189                               | 189          | 189          | 189          |
| Taku Glacier, Hole-<br>in-the Wall | 265          | 265                | 265                               | 265          | 265          | 265          |
| Total                              | <u>7.587</u> | <u>7,587</u>       | <u>7,587</u>                      | <u>7,587</u> | <u>7,587</u> | <u>7.587</u> |

| ALTERNATIVE C TABLE 2-6 – MAXIMUM NUMBER OF LANDINGS BY GLACIER COMPANY: COASTAL HELICOPTERS, INC. |           |           |           |           |           |           |  |  |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
|  | ACTUAL    | PROPOSED  |           |           |           |           |  |  |
| Name of Glacier  | 1994      | 1995      | 1996      | 1997      | 1998      | 1999      |  |  |
| Gilkey Glacier and<br>Backcountry  | 31        | 31        | 31        | 31        | 31        | 31        |  |  |
| Taku Glacier, Hole-<br>in-the Wall   | 26        | 26        | 26        | 26        | 26        | 26        |  |  |
| Total Coastal  | <u>57</u> | <u>57</u> | <u>57</u> | <u>57</u> | <u>57</u> | <u>57</u> |  |  |

| ALTERNATIVE C  Table 2-7 - Maximum Number of Landings by Glacier Company: Era Helicopters |        |              |       |          |              |              |  |  |
|---|--------|--------------|-------|----------|--------------|--------------|--|--|
|   | ACTUAL |              |       | PROPOSED |              |              |  |  |
| Name of Glacier   | 1994   | 1995         | 1996  | 1997     | 1998         | 1999         |  |  |
| Lemon Glacier   | 96     | 96           | 96    | 96       | 96           | 96           |  |  |
| Norris Glacier  | 3,624  | 3,624        | 3,624 | 3,624    | 3,624        | 3,624        |  |  |
| Taku Glacier, Hole-<br>in-the Wall  | 283    | 283          | 283   | 283      | 283          | 283          |  |  |
| Total   | 4.003  | <u>4,003</u> | 4,003 | 4,003    | <u>4,003</u> | <u>4,003</u> |  |  |

| ALTERNATIVE C TABLE 2-8 – MAXIMUM NUMBER OF LANDINGS BY COMPANY |        |        |        |          |        |        |  |  |  |
|---|--------|--------|--------|----------|--------|--------|--|--|--|
|   | ACTUAL |        |        | PROPOSED |        |        |  |  |  |
| NAME OF COMPANY   | 1994   | 1995   | 1996   | 1997     | 1998   | 1999   |  |  |  |
| Total Temsco  | 7,587  | 7,587  | 7,587  | 7,587    | 7,587  | 7,587  |  |  |  |
| Total Coastal   | 57     | 57     | 57     | 57       | 57     | 57     |  |  |  |
| Total Era   | 4,003  | 4,003  | 4,003  | 4,003    | 4,003  | 4,003  |  |  |  |
| Total All Companies   | 11,647 | 11,647 | 11,647 | 11,647   | 11,647 | 11,647 |  |  |  |

# D. ALTERNATIVE D – AUTHORIZE MID-LEVEL NUMBER OF LANDINGS THROUGH 1999

This alternative authorizes additional helicopter landings each year through 1997, after which authorized landings would remain at the 1997 level of 19,039 landings through 1999 (Table 2-12). The daily landing times at the icefield for all landing tours would be limited to 9 a.m. through 7 p.m.

In addition, helicopter landings on the icefield would not be allowed on one weekend day each

week nor on Memorial Day, Independence Day, or Labor Day. This day would be whichever weekend day has the least amount of cruiseship passengers arriving in Juneau over the summer and would be determined before the start of each season. The number of landings by company would be as shown on Tables 2-9, 2-10, and 2-11.

This alternative is intended to address the issues of noise over residential areas, noise disturbance to ground-based recreation users, and impacts to wildlife by limiting daily landing and departure times, not authorizing landings on one weekend day, and limiting the landings to the 1997 level.

| ALTERNATIVE D TABLE 2-9 – MAXIMUM OF LANDINGS ON GLACIER COMPANY: TEMSCO HELICOPTERS, INC. |              |                 |               |               |               |               |  |  |
|--|--------------|-----------------|---------------|---------------|---------------|---------------|--|--|
|  | ACTUAL       | ACTUAL PROPOSED |               |               |               |               |  |  |
| NAME OF GLACIER  | 1994         | 1995            | 1996          | 1997          | 1998          | 1999          |  |  |
| Gilkey Glacier and Backcountry   | 521          | 1,117           | 1,304         | 1,397         | 1,397         | 1,397         |  |  |
| Herbert Glacier  | 559          | 745             | 931           | 1,117         | 1,117         | 1,117         |  |  |
| Mendenhall Glacier   | 5,587        | 6,331           | 6,704         | 7,076         | 7,076         | 7,076         |  |  |
| Lemon Glacier  | 466          | 186             | 279           | 279           | 279           | 279           |  |  |
| Norris Glacier   | 189          | 279             | 372           | 372           | 372           | 372           |  |  |
| Taku Glacier, Hole-<br>in-the Wall   | 265          | 559             | 652           | 745           | 745           | 745           |  |  |
| Twin Glacier   | 0            | 93              | 186           | 186           | 186           | 186           |  |  |
| Total  | <u>7.587</u> | <u>9,310</u>    | <u>10,428</u> | <u>11,172</u> | <u>11,172</u> | <u>11.172</u> |  |  |

| ALTERNATIVE D  TABLE 2-10 – MAXIMUM NUMBER OF LANDINGS BY GLACIER COMPANY: COASTAL HELICOPTERS |           |            |            |            |            |            |  |  |
|--|-----------|------------|------------|------------|------------|------------|--|--|
|  | ACTUAL    |            |            | PROPOSED   |            |            |  |  |
| NAME OF COMPANY  | 1994      | 1995       | 1996       | 1997       | 1998       | 1999       |  |  |
| Gilkey Glacier and<br>Backcountry  | 31        | 50         | 76         | 76         | 76         | 76         |  |  |
| Eagle Glacier  | 0         | 76         | 100        | 100        | 100        | 100        |  |  |
| Herbert Glacier  | 0         | 76         | 100        | 100        | 100        | 100        |  |  |
| Taku Glacier, Hole-<br>in-the Wall   | 26        | 37         | 50         | 50         | 50         | 50         |  |  |
| Total  | <u>57</u> | <u>239</u> | <u>326</u> | <u>326</u> | <u>326</u> | <u>326</u> |  |  |

| TABLE 2-11 – MAXIMUM               | ALTERNATIVE D  TABLE 2-11 – MAXIMUM NUMBER OF LANDINGS BYGLACIER COMPANY: ERA HELICOPTERS |              |              |              |              |              |  |  |  |  |
|------------------------------------|---|--------------|--------------|--------------|--------------|--------------|--|--|--|--|
|                                    | ACTUAL  |              | PROPOSED     |              |              |              |  |  |  |  |
| NAME OF GLACIER                    | 1994  | 1995         | 1996         | 1997         | 1998         | 1999         |  |  |  |  |
| Gilkey Glacier and<br>Backcountry  | 0   | 187          | 243          | 279          | 279          | 279          |  |  |  |  |
| Lemon Glacier                      | 96  | 187          | 279          | 373          | 373          | 373          |  |  |  |  |
| Death Valley                       | 0   | 187          | 233          | 279          | 279          | 279          |  |  |  |  |
| Norris Glacier                     | 3,624   | 5,261        | 5,750        | 6,239        | 6,239        | 6,239        |  |  |  |  |
| Taku Glacier, Hole-<br>in-the Wall | 283   | 46           | 70           | 93           | 93           | 93           |  |  |  |  |
| Twin Glacier                       | 0   | 187          | 233          | 278          | 278          | 278          |  |  |  |  |
| Total                              | <u>4,003</u>  | <u>6,055</u> | <u>6,808</u> | <u>7.541</u> | <u>7.541</u> | <u>7,541</u> |  |  |  |  |

| ALTERNATIVE D  TABLE 2-12 – TOTAL NUMBER OF ICEFIELD LANDINGS BY COMPANY |               |               |               |        |               |        |  |  |  |
|--|---------------|---------------|---------------|--------|---------------|--------|--|--|--|
| ACTUAL PROPOSED  |               |               |               |        |               |        |  |  |  |
| NAME OF COMPANY  | 1994          | 1995          | 1996          | 1997   | 1998          | 1999   |  |  |  |
| Total Temsco   | 7,587         | 9,310         | 10,428        | 11,172 | 11,172        | 11,172 |  |  |  |
| Total Coastal  | 57            | 239           | 326           | 326    | 326           | 326    |  |  |  |
| Total Era  | 4,003         | 6,055         | 6,808         | 7,541  | 7,541         | 7,541  |  |  |  |
| Grand Total  | <u>11,647</u> | <u>15,604</u> | <u>17,562</u> | 19,039 | <u>19,039</u> | 19,039 |  |  |  |

## E. ALTERNATIVE E – SATELLITE HELIPORT

This alternative is the same as the Alternative B - Proposed Action except that a new heliport, which would direct flight paths for landing tours away from residential areas, would be required before any permits would be issued. This heliport proposal would be a satellite station

located near the Eagle Beach area, between miles 25 and 28 on the Glacier Highway, shown on Map 5, Proposed Satellite Heliport. Although a specific site has not been identified, this heliport would require a 300'x300' helipad, a 60'x100' building (which would include a maintenance area, a client receiving area, a pilot rest area, and an office), parking for two buses and ten cars, fuel tanks and fueling facilities, electrical power, sewer, and paved access from

Glacier Highway. This heliport would be used by any operators whose flight paths are over Heintzleman Ridge and Mendenhall Valley. Helicopters would fly to the satellite heliport in the morning and returned to their base heliport in the evening. These flights would travel over Lynn Canal. The total landings would be 22,221 (Table 2-4), the same as Alternative B – Proposed Action.

This alternative is intended to address the issues of existing and increasing noise over residential areas and noise and visual disturbance to ground based recreation users by relocating the departure point and helicopter flight paths to reduce overflights of residential areas. While the Forest Service cannot require relocation of private heliports, this alternative is included to display the consequences of a feasible method, outside the jurisdiction of the Forest Service, to address an environmental issue.

Additional environmental analysis of the satellite heliport would be required following submittal of heliport design. Helicopter landing tours would be authorized at the 1994 level while construction of the heliport occurs. Helicopter landings at the Mendenhall Glacier in 1996 would not be allowed unless from the satellite heliport.

# F. ALTERNATIVE F – 1994 LEVEL WITH LIMITED HOURS AND DAYS

This alternative would be similar to Alternative C – Authorize Current Level of Landings Through 1999, which limits the number of landings to 11,647 (Table 2-8), the level approved for 1994, with the additional restriction of limiting landing of all tours at the icefield to the hours of 9 a.m. through 6 p.m. Helicopter landing tours would not be allowed one weekend day each week. This day would be

whichever day has the least amount of cruiseship passengers arriving in Juneau for that year and would be determined prior to the start of each season. Helicopter landing tours would also not be allowed on Memorial Day, Independence Day, and Labor Day. This alternative would not allow any landings on Zone 2-Eagle Glacier, Zone 6-Death Valley, and Zone 9 Twin Glacier.

This alternative is intended to address the issues of noise over residential areas and noise and visual disturbance to ground based recreation users by authorizing landings only up to current levels and not authorizing landings on major holidays and one day each weekend.

# G. ALTERNATIVE G AUTHORIZE MID-LEVEL NUMBER OF LANDINGS THROUGH 1999 WITH LANDING-FREE ZONES

This alternative authorizes additional helicopter landings each year through 1997, after which authorized landings would remain at the 1997 level, 19,039 landings (Table 2-16). The number of landings would be the same as Alternative D - Mid-level Number of Landings Through 1999. The hours when landings could occur would be restricted to 8:30 a.m. to 8 p.m. This alternative would not allow any landings on Zone 2-Eagle Glacier, Zone 6-Death Valley, and Zone 9-Twin Glacier. The number of landings by company would be as shown on Tables 2-13, 2-14, 2-15, and 2-16.

This alternative is intended to address the issues of noise over residential areas, noise disturbance to ground-based recreation users, and impacts to wildlife by limiting the landings to the 1997 level. This alternative was developed after reviewing comments on the DEIS.

| TABLE 2-13 – MAXIMUM               | Number of L  | NATIVE G     | COMPANY: T | EMSCO HELIC   | OPTERS, INC.  |               |
|------------------------------------|--------------|--------------|------------|---------------|---------------|---------------|
|                                    | ACTUAL       |              |            | PROPOSED      |               |               |
| NAME OF GLACIER                    | 1994         | 1995         | 1996       | 1997          | 1998          | 1999          |
| Gilkey Glacier and<br>Backcountry  | 521          | 1,117        | 1,304      | 1,397         | 1,397         | 1,397         |
| Herbert Glacier                    | 559          | 745          | 931        | 1,117         | 1,117         | 1,117         |
| Mendenhall Glacier                 | 5,587        | 6,331        | 6,704      | 7,076         | 7,076         | 7,076         |
| Lemon Glacier                      | 466          | 186          | 279        | 279           | 279           | 279           |
| Norris Glacier                     | 189          | 372          | 558        | 558           | 558           | 558           |
| Taku Glacier, Hole-<br>in-the Wall | 265          | 559          | 652        | 745           | 745           | 745           |
| Total                              | <u>7,587</u> | <u>9,310</u> | 10,428     | <u>11,172</u> | <u>11,172</u> | <u>11,172</u> |

| ALTERNATIVE G  TABLE 2-14 - MAXIMUM NUMBER OF LANDINGS BY GLACIER  COMPANY: COASTAL HELICOPTERS |                 |            |            |            |            |            |  |
|---|-----------------|------------|------------|------------|------------|------------|--|
|   | ACTUAL PROPOSED |            |            |            |            |            |  |
| NAME OF COMPANY   | 1994            | 1995       | 1996       | 1997       | 1998       | 1999       |  |
| Gilkey Glacier and Backcountry  | 31              | 50         | 76         | 76         | 76         | 76         |  |
| Eagle Glacier   | 0               | 0          | 0          | 0          | 0          | 0          |  |
| Herbert Glacier   | 0               | 152        | 200        | 200        | 200        | 200        |  |
| Taku Glacier, Hole-in-the Wall  | 26              | 37         | 50         | 50         | 50         | 50         |  |
| Total   | <u>57</u>       | <u>239</u> | <u>326</u> | <u>326</u> | <u>326</u> | <u>326</u> |  |

| TABLE 2-15 - MAXIMUN               | Number of L | Co           | MPANY: ERA I | HELICOPTERS  |              |              |
|------------------------------------|-------------|--------------|--------------|--------------|--------------|--------------|
|                                    | ACTUAL      |              |              | PROPOSED     |              |              |
| NAME OF GLACIER                    | 1994        | 1995         | 1996         | 1997         | 1998         | 1999         |
| Gilkey Glacier and<br>Backcountry  | 0           | 187          | 243          | 279          | 279          | 279          |
| Lemon Glacier                      | 96          | 187          | 279          | 373          | 373          | 373          |
| Death Valley                       | 0           | 0            | 0            | 0            | 0            | 0            |
| Norris Glacier                     | 3,624       | 5,635        | 6,216        | 6,796        | 6,796        | 6,796        |
| Taku Glacier, Hole-<br>in-the Wall | 283         | 46           | 70           | 93           | 93           | 93           |
| Total                              | 4,003       | <u>6,055</u> | <u>6,808</u> | <u>7,541</u> | <u>7,541</u> | <u>7,541</u> |

| TABLE 2-16 – TOTAL N | UMBER OF ICE |               | RNATIVE G     | ΙΥ            |               |        |  |  |
|----------------------|--------------|---------------|---------------|---------------|---------------|--------|--|--|
|                      | ACTUAL       | PROPOSED      |               |               |               |        |  |  |
| NAME OF COMPANY      | 1994         | 1995          | 1996          | 1997          | 1998          | 1999   |  |  |
| Total Temsco         | 7,587        | 9,310         | 10,428        | 11,172        | 11,172        | 11,172 |  |  |
| Total Coastal        | 57           | 239           | 326           | 326           | 326           | 326    |  |  |
| Total Era            | 4,003        | 6,055         | 6,808         | 7,541         | 7,541         | 7,541  |  |  |
| Grand Total          | 11,647       | <u>15,604</u> | <u>17,562</u> | <u>19,039</u> | <u>19,039</u> | 19,039 |  |  |

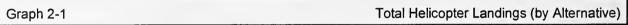
#### H. COMPARISON OF ALTERNATIVES

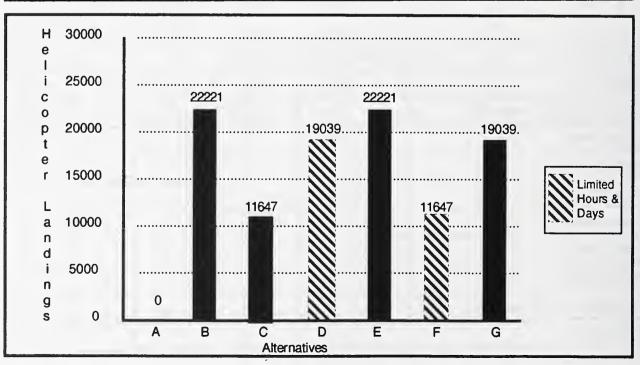
| Таві | TABLE 2-17 COMPARISON OF ALTERNATIVE COMPONENTS                                      |                                     |                 |               |                                |  |  |  |
|------|--|-------------------------------------|-----------------|---------------|--------------------------------|--|--|--|
| ALTE | ERNATIVE   | MAXIMUM NO. OF<br>LANDINGS          | LANDING HOURS   | DAYS/<br>WEEK | HELIPORT                       |  |  |  |
| Α    | No Action  | 0                                   | 0               | 7             | No Change                      |  |  |  |
| В    | Proposed Action  | 1999 Proposed<br>(22,221 Landings)  | 8:30 a.m 8 p.m. | 7             | No Change                      |  |  |  |
| С    | Authorize Current Level of<br>Landings Through 1999                                  | 1994 Permitted<br>(11,647 Landings) | 8:30 a.m 8 p.m. | 7             | No Change                      |  |  |  |
| D    | Authorize Mid-level No. of<br>Landings Through 1999                                  | 1997 Proposed<br>(19,039 Landings)  | 9 a.m 7 p.m.    | 6*            | No Change                      |  |  |  |
| E    | Satellite Heliport   | 1999 Proposed<br>(22,221 Landings)  | 8:30 a.m 8 p.m. | 7             | Move to Eagle<br>Herbert River |  |  |  |
| F    | 1994 Level with Limited<br>Hours Per Day   | 1994 Permitted<br>(11,647 Landings) | 9 a.m 6 p.m.    | 6*            | No Change                      |  |  |  |
| G    | Authorize Mid-level<br>Number of Landings<br>Through 1999 With<br>Landing-free Zones | 1997 Proposed<br>(19,039 Landings)  | 8:30 a.m 8 p.m. | 7             | No Change                      |  |  |  |

\*Excluding holidays

| Table 2-18                     | GLACIER LANDINGS BY ALTERNATIVE |   |   |   |   |   |   |
|--------------------------------|---------------------------------|---|---|---|---|---|---|
| GLACIER                        | А                               | В | С | D | E | F | G |
| Gilkey Glacier & Backcountry   |                                 | ~ | ~ | ~ | ~ | ~ | ~ |
| Eagle Glacier                  |                                 | ~ |   | V | ~ |   |   |
| Herbert Glacier                |                                 | ~ | ~ | ~ | V |   | ~ |
| Mendenhall Glacier             |                                 | ~ | ~ | ~ | ~ | V | ~ |
| Lemon Glacier                  |                                 | ~ | ~ | ~ | ~ | V | ~ |
| Death Valley                   |                                 | ~ |   | ~ | V |   |   |
| Norris Glacier                 |                                 | ~ | ~ | ~ | ~ | ~ | ~ |
| Taku Glacier, Hole-in-the-Wall |                                 | ~ | ~ | V | ~ | V | V |
| Twin Glacier                   |                                 | ~ |   | V | V |   |   |

| TABLE 2-19 : MAXIMUM HELIC            | OPTER LAI | NDINGS BY G | LACIER FOR | 1999 (By      | ALTERNATIV | E) ALL        | COMPANIES     |
|---------------------------------------|-----------|-------------|------------|---------------|------------|---------------|---------------|
| GLACIER                               | Α         | В           | С          | D             | E          | F             | G             |
| Gilkey Glacier &<br>Backcountry       | 0         | 2,174       | 552        | 1,752         | 2,174      | 552           | 1,752         |
| Eagle Glacier                         | 0         | 150         | 0          | 100           | 150        | 0             | 0             |
| Herbert Glacier                       | 0         | 1,640       | 559        | 1,217         | 1,640      | 559           | 1,317         |
| Mendenhall Glacier                    | 0         | 7,449       | 5,587      | 7,076         | 7,449      | 5,587         | 7,076         |
| Lemon Glacier                         | 0         | 745         | 562        | 652           | 745        | 562           | 652           |
| Death Valley                          | 0         | 373         | 0          | 279           | 373        | 0             | 0             |
| Norris Glacier                        | 0         | 7,775       | 3,813      | 6,611         | 7,775      | 3,813         | 7,354         |
| Taku and Hole-in-the-Wall<br>Glaciers | 0         | 1,170       | 574        | 888           | 1,170      | 574           | 888           |
| Twin Glacier                          | 0         | 745         | 0          | 464           | 745        | 0             | 0             |
| TOTAL                                 | <u>0</u>  | 22,221      | 11,647     | <u>19,039</u> | 22,221     | <u>11,647</u> | <u>19,039</u> |





| TABLE 2-20           | Table 2-20 AVERAGE INCREASE IN FLIGHTS PER DAY (BY ALTERNATIVE) |     |          |     |          |      |      | NATIVE)* |
|----------------------|---|-----|----------|-----|----------|------|------|----------|
|                      | 1994 TOTAL  | A   | VERAGE I |     | FROM 199 |      |      | LE       |
| NAME                 | FLIGHTS PER DAY   | Α   | В        | С   | D        | E    | F    | G        |
| Temsco (Mendenhall)  | 40.0  | 0.0 | 13.0     | 0.0 | 19.0     | 13.0 | 8.0  | 11.0     |
| Temsco (Explorer)    | 14.0  | 0.0 | 23.0     | 0.0 | 21.0     | 23.0 | 17.0 | 15.0     |
| Coastal              | 0.4   | 0.0 | 3.0      | 0.0 | 2.0      | 3.0  | 0.1  | 2.0      |
| ERA                  | 29.0  | 0.0 | 36.0     | 0.0 | 34.0     | 36.0 | 5.0  | 25.0     |
| Total                | 83.4  | 0.0 | 75.0     | 0.0 | 78.0     | 75.0 | 30.1 | 53.0     |
| % Increase Over 1994 | N/A   | 0%  | 90%      | 0%  | 90%      | 90%  | 31%  | 64%      |

\*For individual helicopters

#### I. MITIGATION

For all mitigation measures, it is recognized that exceptions may be made for aircraft safety. Aircraft and passenger safety will take precedent over these mitigation measures.

The following operational guidelines will be required for all action alternatives:

- All authorized operations will assure that operators meet FAA requirements to achieve safe air operations (routing, airspace separation and coordination with other operators).
- All operations will maintain a 1,500 foot vertical and horizontal clearance of key mountain goat areas, mountain goats, bird nesting areas, brown and black bears, wolves, moose, sea lions, and other marine mammals, shown on Maps 11a-11w.
- 3. Flight paths will avoid mountain goat kidding areas from May 15 through June 15, shown on Map 6.

- 4. All authorized operations will adhere to U.S. Fish and Wildlife recommendations regarding eagle nests (US Fish and Wildlife Service, 1992) of:
  - a. Maintain established travel routes, but avoid any eagle nest by at least 1/4 mile (1,320 feet).
  - b. Helicopters must avoid hovering and circling around any eagle nest.
  - c. Report to the U.S. Fish and Wildlife Service office and the Forest Service any eagle nests found that are not indicated on the map provided
- 5. Do not hover, circle, or harass wildlife in any way. This refers particularly to mountain goats, eagles, bears, sea lions, and other marine mammals, but includes all other species.
- 6. All operations will be requested to report observations of mountain goats, brown and black bear, moose, wolf, and wolverines to

the Forest Service by November 1 of the operating year.

- 7. All authorized operators will be required to submit and abide by an Operating Plan which will discuss operations and safety. Such Operating Plan will be approved by the Forest Service and will be a part of the special-use permit.
- 8. In partnership with the Forest Service, develop a training video, or some other interpretive communication, for helicopter pilots and general public detailing appropriate aircraft behavior in regards to wildlife. The format of this message shall be mutually agreed to by the Forest Service and companies under a Participating Agreement or as part of a Special Use Permit.

## J. ALTERNATIVES ELIMINATED FROM DETAILED STUDY

Several options were suggested and considered but were not carried forward as alternatives. These options and the reason for not considering are discussed below.

#### Reduce the Number of Landings Allowed Below 1994 Levels

The option of reducing the number of landings allowed to a level below the currently permitted level does not meet the purpose and need of meeting the current public demand for providing the opportunity to experience and set foot on a glacier. Projections for cruiseships stopping in Juneau show an increase for the foreseeable future (Juneau Empire, 2/16/95). The current levels of helicopter tours may meet existing demand, but reduced levels would not. This alternative was dropped from further study.

#### Move Heliport to Montana Creek or Lemon Creek

Authorizing helicopter landings only if
Temsco's heliport was moved to the areas of
either Montana Creek or Lemon Creek would
not result in a reduction of noise to residential
areas from takeoffs and landings. A Forest
Service sound study (USDA Forest Service,
1994a) determined that a heliport in the
Montana Creek area would likely result in more
of an impact than the current site. Therefore,
only the option of locating an alternative
heliport site away from residential areas was
considered.

### Forest Service-Designated Flight Paths

The alternative of authorizing helicopter landings on the icefield only using Forest Service-designated flight paths was dismissed for several reasons. As discussed in Chapter 1, the Forest Service does not have the authority to stipulate or enforce flight paths for helicopters. In addition, assuming that heliports remained at the current locations, the flight paths used are generally dictated by the weather. Most flights are up Heintzleman Ridge during clear days or days with high clouds. On days with low clouds or fog, the flight paths are more towards the Mendenhall Valley. These routes were developed by Temsco coordinating with residents in these areas. Because of the close proximity of residential areas to one another, moving flight paths one way or the other would reduce impacts to some residents but at the same time would increase impacts to others by rerouting flights over other residents. Therefore, directing the helicopter tour companies to fly specific routes would not be practical and would not decrease impacts but rather move them around.

#### **Requiring Larger Helicopters**

Temsco, Coastal, and Era have voluntarily switched to A-Star Helicopters, which carry more passengers and generate less noise than the previously used Hughes 500. Larger helicopters would require fewer trips because they would carry more passengers per trip but would generate more noise with each trip.

[End of Chapter]







#### **CHAPTER 3 – AFFECTED ENVIRONMENT**

#### A. INTRODUCTION

This chapter discusses the existing environment, or baseline, of the area affected by the proposed action or alternatives. The resources that would be affected by the proposed project are described.

#### **B. AIRPORT INFLUENCE ZONE**

The Airport Influence Zone is shown on Map 8. This influence zone is a three-nautical-mile radius around the airport. Within this zone, FAA, in cooperation with the City and Borough of Juneau, has direct control over aircraft flight paths. They do not have authority over aircraft noise other than jets. The City and Borough of Juneau is the agency responsible for managing noise within this influence zone, however, if the City and Borough of Juneau were to approve a noise ordinance, it would have to have FAA concurrence.

#### C. JUNEAU ICEFIELD

The defined area of the icefield is the same as the 1987 Environmental Assessment except for the addition of the Wright Glacier area in the Twin Glacier Zone.

#### D. ACOUSTICAL ENVIRONMENT

Measurements of helicopter sound and the ambient background sound were made at twelve locations throughout Juneau to aid in the assessment of the sound impact of helicopter tours (USDA, Forest Service, 1994a). These measurements were recorded on tape and

analyzed in the laboratory to allow comparisons of the overall environmental sound levels with and without the helicopter sound present. This chapter discusses the noise levels without the helicopters present.

This sound study was conducted by Forest Service sound specialists Robin T. Harrison P.E. and Eric Shilling, Mechanical Engineering Technician (see Chapter 5-List of Preparers). These sound specialists are employed by the USDA Forest Service Technology and Development Center, San Dimas, CA (SDTDC). This Technology and Development center provides long term continuity in scientific development and maintains a technology base. Centers such as this are small professional/technical units with expertise in disciplines such as civil, mechanical, aerospace, electronic, and logging engineering; recreation, forestry, and social science; equipment specialists and engineering technicians. This center works in partnership with public and private entities to use technology to solve resource management problems.

The following twelve measurement sites were chosen and are shown on Map 9, Sound Study Measurement Sites. The background noise results are also presented.

Site #1. Located near the center of an approximately ½ square mile residential area, called Totem Park, about ¼ mile northwest of Juneau Airport, near the Mendenhall Wetlands State Game Refuge. The residential area is surrounded on three sides by industrial and commercial zoned areas.

This site is approximately one mile west of the Heintzleman Ridge Trail and three miles south of the Dredge Lakes trails.

Sound sources that contributed to the overall background sound level included numerous fixed wing propeller driven aircraft, trucks and cars driving on the adjacent roads, and jet aircraft take-offs.

Site #2. Located on the shore of Auke Bay, in a residential area approximately one mile south of Glacier Highway along Fritz Cove Road on the west side of the Mendenhall Peninsula. This site is approximately two miles west of Juneau Airport and helicopters can be seen and heard from the site as they fly their west flight routes.

This site is approximately three miles west of the Heintzleman Ridge Trail and 3½ miles southwest of the Dredge Lake trails.

Sound sources contributing to the overall background level included jet takeoffs, fixed wing propeller driven aircraft, automobile traffic on the adjacent road, and the wake of a passing ship breaking on the shore of Auke Bay.

Site #3. Located in a relatively quiet residential neighborhood near Mendenhall Lake and National Forest System lands. The residential area is approximately 0.2 miles by 0.3 miles in size and is located approximately four miles north of Juneau Airport.

This site is approximately ¼ mile east of the Dredge Lake trails and ¼ mile from the West Glacier Trailhead..

At this site, the background sound level was relatively low and mainly consisted of distant fixed wing propeller and jet powered aircraft sound. Site #4. Located approximately ¼ mile north of Juneau Airport, in the same general area as Site #1. This location is surrounded by Egan Drive, Glacier Highway, and Mendenhall Loop Road. The site is located on the southern end of the subdivision and is closest to the airport.

The background sound during this test segment consisted of numerous takeoffs by fixed wing propeller driven aircraft, a jet takeoff, and cars and trucks driving on the adjacent residential street.

Site #5. Located in a residential area along Glacier Highway (which runs parallel to Egan Drive) approximately ½ mile southeast of Temsco's heliport location on the Juneau Airport. The site is at the southern base of Heintzleman Ridge.

This site is close to the trailhead of the Heintzleman Ridge Trail.

The background sound at this site consisted of almost constant sound from the adjacent roadways, sound from fixed wing jet and propeller driven aircraft, and some sound from neighbor's cars on the driveway directly adjacent to the test site.

Site #6. Located along Glacier Highway, in the same general area as Site #5, but is approximately 0.15 miles closer to the Temsco Heliport area.

The background sound level was relatively high at this site and made it difficult to distinguish helicopter sounds from the almost constant sound from road traffic on the adjacent road and highway.

Site #7. Located in Lemon Creek Valley, approximately three miles east of Juneau Airport between the Blackerby Ridges, on the west side of a subdivision which measures approximately one-half mile by one-third mile, and borders a commercial and industrial area to the south.

This site is approximately 1½ miles east of the Heintzleman Ridge Trail.

The background sound at this site consisted of distant road traffic sound, fixed wing jet and propeller driven aircraft, a neighbor's barking dog, and local traffic on the adjacent residential street.

Site #8. Located across the Gastineau Channel from downtown Juneau, in west Juneau, approximately seven miles southeast of Juneau Airport. The site is at the top of the Blueberry Hills subdivision, approximately 500 feet above sea level at the base of the mountains on Douglas Island.

This site is not close to any trails identified in the issues section.

The background sound was dominated by the floatplane operations from Gastineau Channel, near downtown Juneau.

Site #9. Located in a small residential area approximately five miles southeast of Juneau Airport, at the southwest base of Blackerby Ridge, near Salmon Creek.

This site is not close to any trails identified in the issues section.

Background sound at this site consisted of road traffic sound from the nearby highway, fixed wing jet and propeller driven aircraft, and wind blowing through the trees. A small amount of sound could be heard from children playing and traffic on the adjacent residential streets.

Site #10. Located approximately one mile north of the Mendenhall Glacier Visitor Center, on the East Glacier Loop Trail, approximately 300 feet above sea level and is about 5 miles north of Juneau Airport.

This site is approximately one mile northeast of the Dredge Lakes Trail and 2 miles east of West Glacier Trail.

Background sound at this site consisted of fixed wing aircraft sound, wind sound, and some sound from hikers on the trail.

Site #11. Located approximately 4,200 feet above sea level, six miles north of Juneau Airport, on Bullard Mountain.

This site is one mile north of the East Glacier Loop Trail.

The background sound level at this site was low and consisted of sound from a distant waterfall, distant road traffic in the valley below, and fixed wing aircraft sound.

Site #12. Located at the top of Heintzleman Ridge, at approximately 2,800 feet above sea level, and three miles northwest of Juneau Airport. A high level of wind noise at this site prevented a meaningful analysis, and, therefore, results from this site are not included in this analysis.

#### **Summary of Test Results**

The results of the sound measurements are:

| SOUND MEA | TABLE 3-1<br>SUREMENT TEST RESULTS |
|-----------|------------------------------------|
| SITE#     | BACKGROUND LEVELS (DB)             |
| 1         | 51.8                               |
| 2         | 57.4                               |
| 3         | 39.3                               |
| 4         | 53.5                               |
| 5         | 54.3                               |
| 6         | 61.3                               |
| 7         | 47.3                               |
| 8         | 54.0                               |
| 9         | 52.5                               |
| 10        | 49.4                               |
| 11        | 37.2                               |
| 12        | Too much wind noise                |

#### E. RECREATION PLACES:

#### Mendenhall Glacier Recreation Area

The Mendenhall Glacier Recreation Area is an area designated by the Forest Service for the purpose of public recreation use. This area is located in the northern portion of the Mendenhall Valley (see Map 10). It receives over 280,000 visitors per year. Activities within this area include camping, picnicking, hiking, sightseeing, boating, and off-road vehicle use. Mendenhall Glacier Campground, Mendenhall Glacier Visitor Center, Dredge and Moraine Lakes Areas, Skater's Cabin, and an extensive trail system all exist within this recreation area.

#### **Trails**

Helicopter landing tour flights can be heard from most trails located within the Mendenhall Glacier Recreation Area (MGRA), shown on Map 10: MGRA Trails. These trails consist primarily of routes within the Dredge Lake and Moraine Lakes Management Units, and total approximately 17 miles.

There are six main trails within this area which are traveled by a substantially greater number of people per day due to their proximity to the Mendenhall Visitor Center and the Mendenhall Glacier. These trails are:

- 1. West Glacier Trail (3.4 miles)
- 2. East Glacier Loop Trail (3.5 miles)
- 3. Trail of the Glacier (.5 mile)
- 4. Nugget Creek Trail (4 miles)
- 5. Steep Creek (.5 mile)
- 6. Moraine Ecology Trail (1.5 miles).

#### Mendenhall Glacier Visitor Center

The Mendenhall Glacier Visitor Center received approximately 280,000 visitors during 1994. Helicopters can be seen and heard from the area around the visitor center. Center employees received several complaints during the 1994 summer season. These complaints indicate that some of these visitors have their enjoyment of the visitor center affected by helicopter noise.

## Mendenhall Glacier Campground and Skater's Cabin Day-Use Site

The Mendenhall Glacier Campground received approximately 11,780 visitors in 1994 (USDA Forest Service, 1994b). This campground is open between May 15 and September 15 each year. This campground provides 60 camping sites, with each site holding approximately 5 persons. Most visitors to this campground are car campers, backpackers, or recreational vehicle campers who are visiting Juneau and

usually stay from 2 to 14 days. Persons staying at this campground can hear and see helicopters traveling on landing tour flight paths.

Skater's Cabin Day Use Site receives use comparable to the Mendenhall Glacier Campground and is located adjacent to the campground. The users at this site, however, are day use picnickers, hikers, bicycle users, rafters, wind surfers, kayakers, and persons viewing scenery.

## Trails Outside the Mendenhall Glacier Recreation Area

The trails located outside the Mendenhall Glacier Recreation Area from which helicopter noise and sightings of helicopters flying the landing tour flight paths can be encountered are:

- 1. Heintzleman Ridge Trail (9.5 miles)
- 2. Montana Creek Trail (7.2 miles)
- 3. Spaulding Meadows Trail (3 miles)
- 4. Auke Nu Trail (2.5 miles)
- 5. Herbert Glacier Trail (4.6 miles)
- 6. Amalga Trail (7 miles)
- 7. Windfall Trail (3.5 miles)
- 8. Peterson Lake Trail (4.3 miles)
- 9. Mount McGinnes Path
- 10. Sheep Creek Trail
- 11. Granite Creek Trail
- 12. Perserverance Trail
- 13. Lemon Creek Trail
- 14. Salmon Creek Trail and Road
- 15. Point Bishop Trail
- 16. Blackerby Ridge

The types of uses occurring on these trails are bicycle use, hiking, jogging, off road vehicle use, snow mobiles, viewing scenery, viewing wildlife, hunting.

#### F. WILDLIFE

The area of analysis for wildlife resources includes the Juneau Icefield and the helicopter flight paths used to reach the icefield. The Eagle and Herbert Rivers are also included in the area of analysis as related to Alternative E – Satellite Heliport. Specific zones are discussed as separate sections because wildlife use and habitats are unique within each zone. Wildlife concerns focus primarily on mountain goats, but other species are briefly discussed.

Maps 11a-11w show mountain goat distributions as predicted by a Habitat Capability Model. These models were developed by the USDA Forest Service and the Alaska Department of Fish and Game in 1988 for the Tongass Land Management Plan Revision. Information in USDA Forest Service Geographic Information System (GIS) databases regarding topographic features (steep escape terrain) and habitat features (old growth forests on southerly aspects with 1300' of escape terrain) was used to generate these models. The models predict winter distribution. Because most populations of mountain goats in the area of analysis do not travel more than several miles from winter to summer habitat, it is appropriate to use these models to predict spring, summer, and fall goat use areas.

#### Juneau Icefield Backcountry

Wildlife resources are minimal in the zone of permanent ice. Habitats associated with the flight paths to and from the icefield backcountry are of primary concern in evaluating effects.

#### Gilkey Glacier

Mountain goats occur in the mountainous areas surrounding the Gilkey Glacier. Alaska Department of Fish and Game has not identified specific kidding or breeding areas adjacent to

the Gilkey Glacier. Black and brown bears also occur in the area and forage in the high country that is adjacent to the glacier in spring, summer, and fall. Wolves occur in packs that wander, particularly in spring, summer, and fall in the alpine and subalpine country adjacent to the icefield. Wolves den and raise their young in these alpine and subalpine areas. Wolverines are present in this area. In addition, moose are present in the Berner's Bay area and up the Gilkey River to the lake at the foot of the glacier. Trumpeter swans were reported for the first time in 1994, probably a nesting pair, near the mouth of the Antler and Gilkey Rivers. Eagle nests occur along the flight paths to this zone.

#### **Eagle Glacier and River**

Mountain goats occur in the mountainous areas surrounding Eagle Glacier. Specific kidding and breeding habitat has not been identified. Black and brown bears occur in the area and forage in the high country adjacent to the glacier in spring, summer and fall. Bears also use the river valley all the way to tidewater. Wolves occur in packs that wander, particularly in spring, summer, and fall in the alpine and subalpine country adjacent to the icefield. Wolves den and raise their young in these alpine and subalpine areas. Wolverines have been observed in the high country, as well as in the river drainage, particularly in winter.

Eagle River is noted for its habitat diversity and species richness. Abundant beaver ponds create rich songbird, woodpecker, and waterfowl habitat. Northern goshawks are known to nest in the valley, and other raptors, including owls, are frequently observed. River otters can be found along the river. Eagle nests occur along the flight paths to this zone.

#### Herbert Glacier and River

Mountain goats occur in the mountainous areas adjacent to Eagle Glacier, Specific kidding and breeding habitat is delineated in the Map section of this document (Map 6). Black and brown bears occur in the area and forage in the high country adjacent to the glacier in spring, summer, and fall. Bears also use the river valley all the way to tidewater. Wolves occur in packs that wander, particularly in spring, summer and fall, in the alpine and subalpine country adjacent to the icefield. Wolves den and raise their young in these alpine and subalpine areas. Northern goshawks have been observed in the valley. Despite intense efforts, a nest has not yet been located. Other raptors, including owls, are frequently observed. Wolverines exist in the high country and in the valley, particularly in winter.

Herbert River is also noted for its habitat diversity and species richness. Abundant beaver ponds create rich songbird, woodpecker, and waterfowl habitat. In 1994, Forest Service biologists located fledged juvenile goshawks at Windfall Lake. It was late enough in the season that a nest could not be located. Trumpeter swans have recently been reported in Windfall Lake in the summer, nesting has not yet been documented, although Trumpeters seem to be expanding their breeding range farther into Southeast Alaska. Eagle nests occur along the flight paths to this zone (see Map 6).

#### Mendenhall Glacier and Valley

Mountain goats are easily observed on Mt. Bullard from the Mendenhall Glacier Visitor Center observatory year round. Mountain goats are also present, though less easily viewed, on Mt. McGinnis and Mt. Stroller White. Map 6 delineates mountain goat kidding and breeding habitat within this zone. Black and brown bears occur in the area and forage in the high country adjacent to the glacier in spring, summer, and

fall. Wolves occur in packs that wander, particularly in spring, summer, and fall in the alpine and subalpine country adjacent to the icefield. Wolves den and raise their young in these alpine and subalpine areas. Wolverines have been observed in the area. Northern goshawks nest in the Nugget Creek valley and are known to hunt in alpine and subalpine areas adjacent to the Mendenhall Glacier. Eagle nests occur along the flight paths to this zone.

#### Lemon Creek Glacier

Map 6 delineates mountain goat kidding and breeding habitat in relation to Lemon Creek glacier. Black and brown bears occur in the area and forage in the high country adjacent to the glacier in spring, summer, and fall. Wolves occur in packs that wander, particularly in spring, summer, and fall in the alpine and subalpine country adjacent to the icefield. Wolves den and raise their young in these alpine and subalpine areas. Wolverines also occur in the area. Eagle nests occur along the flight paths to this zone.

#### **Death Valley**

Map 6 delineates mountain goat kidding and breeding habitat locations. Black bears, brown bears, wolves, and wolverines occupy habitats traversed en route to Death Valley. These species use these habitats as previously described. Eagle nests occur along the flight paths to this zone.

#### Norris Glacier, Taku Glacier, Hole-In-The-Wall, and Twin Glacier

Map 6 delineates mountain goat kidding and breeding habitat locations. Black and brown bears occur in the area and forage in the high country adjacent to the glacier in spring, summer, and fall. Wolves occur in packs that wander, particularly in spring, summer, and fall, in the alpine and subalpine country adjacent to the icefield. Wolves den and raise their young in these alpine and subalpine areas. Wolverines also occur in the area. Moose occur in the Taku River drainage as well as along those rivers and streams flowing into the Taku. Eagle nests occur along the flight paths to this zone. This area has been identified as an important big game hunting area.

[End of Chapter]







## CHAPTER 4 – ENVIRONMENTAL CONSEQUENCES

#### A. Introduction

This chapter provides the analytical basis for comparison of the project alternatives (Chapter 2). It discusses the anticipated environmental effects associated with implementation of the action alternatives in comparison to Alternative A – No Action.

## Effects Common to All Alternatives: Flight Path and Noise

Measurements of helicopter sound and the ambient background sound were made at twelve locations throughout the Juneau area (USDA Forest Service, 1994a). These measurements were recorded and analyzed in the Forest Service San Dimas Technology and Development Center laboratory to allow comparisons of the overall environmental sound levels with and without the helicopter sound present. The main focus of these measurements was on the impact of helicopter

sound on local residents. The method used in this study compares the equivalent sound level (Leq) of the background or ambient sound to the level with helicopter sound included. This allows the helicopter landing tour activities' contribution to the total sound level for that time period to be quantified for comparison purposes.

An attempt was made to take measurements during extensive helicopter activities in the area of interest. Sound measurements were taken, as nearly as possible, under conditions representing typical helicopter flight conditions (elevation, frequency, and number of ships). The frequency of flights used in the study (one group of five helicopters every twenty-five minutes) represents the highest frequency anticipated under any alternative.

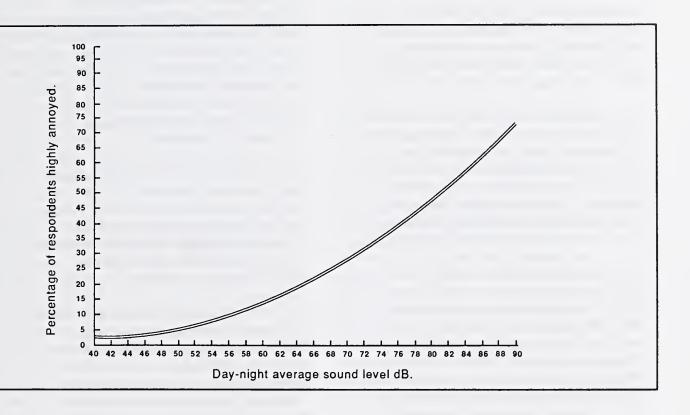
The results of these measurements are shown on Table 4-1.

|       | TABLE 4-1 - SOUND MEAS | SUREMENT TEST RESULTS (IN DECI | BELS)            |
|-------|------------------------|--------------------------------|------------------|
| SITE# | COMBINED LEQ (DBA)     | BACKGROUND LEQ (DBA)           | CHANGE LEQ (DBA) |
| 1     | 56.4                   | 51.8                           | 4.6              |
| 2     | 57.9                   | 57.4                           | 0.5              |
| 3     | 47.7                   | 39.3                           | 8.4              |
| 4     | 55.3                   | 53.5                           | 1.8              |
| 5     | 54.9                   | 54.3                           | 0.6              |
| 6     | 61.7                   | 61.3                           | 0.4              |
| 7     | 50.3                   | 47.3                           | 3                |
| 8     | 55.4                   | 54.0                           | 1.4              |
| 9     | 54.0                   | 52.5                           | 1.5              |
| 10    | 54.5                   | 49.4                           | 5.1              |
| 11    | 46.4                   | 37.2                           | 9.2              |
| 12    | Too mu                 | ch wind                        | nois             |

The relationship between noise exposure and level of community annoyance was used as a general guideline for this analysis to assess the acoustic impact of the helicopter operations. The difference between the annoyance percentage for the background and combined sound levels indicates the relative noise impact for each site. An index known as the "Percent Highly Annoyed," based on an analysis of complaint patterns at various

airports nationwide has been developed and is based on standard techniques (Harris, 1991). This "Percent Highly Annoyed" correlates well with different levels of noise and has been adopted by the FAA and Environmental Protection Agency. (Alaska State Legislature, 1993).

Graph 4-1
Relationship Between Noise Exposure and Percentage of Community Highly Annoyed.



The study concluded that the sound levels from the helicopters in the noise study were not high enough or of long enough duration to pose a threat to hearing safety for either humans or animals. Therefore, the only acoustic impact resulting from the helicopter sounds is that of annoyance to people who reside in areas close to the helicopter flight paths.

The overall impact, as gauged by an increase on the annoyance-percentage graph, due to the helicopter sounds, is low for most of the measurement sites during the study. Even the sites with a larger difference between the background and combined levels had overall sound levels that rated relatively low on the annoyance-percentage relationship graph.

Other sound sources such as fixed wing propeller and jet aircraft, road traffic, and other human-made sounds are prevalent at most of the measurement sites. Higher background sound levels from these other sources tend to mask the helicopter sounds to some extent. Therefore, areas with these higher background sound levels would tend to be less impacted by the helicopter sounds.

Depending upon the continued demand for helicopter tours (both landing and flightseeing tours), there may be little difference in the effects generated by any alternative. The effects created by each alternative can be broadly divided into physical impacts at the icefield landing sites and secondary effects, primarily noise, resulting from helicopter overflights of residential, recreational, and wildlife areas. Physical disturbance at the icefield landing sites is insignificant because of the nature of the sites and is not a function of the number of landings. The secondary effects of helicopter overflights to and from the icefield landing sites are the same regardless of whether or not the helicopters land or remain airborne, but the number of

overflights increases the duration of disturbance. For alternatives which constrain or limit the number of icefield landings, helicopter companies, in order to meet demand, have the option of continuing to market helicopter rides as flightseeing tours using the same flight paths as landing tours. Assuming that the demand is being met, the same number of helicopters could be creating the same effect on residents, recreationists, and wildlife under all alternatives, including Alternative A – No Action.

The three helicopter companies are interested in new, low-noise helicopters. They will likely begin integrating these low noise helicopters into their fleet in the next five years. Use of low-noise helicopters could lessen the current noise levels indicated in the sound study (USDA Forest Service, 1994a).

If the number of landings authorized under the alternatives does not meet demand, then flightseeing tours without landings could be used to meet demand. Consequently, the number of flights from the combination of landing and flightseeing tours could equal demand, which is expected to be equal to Alternative B – Proposed Action.

## B. ISSUE 1 – NOISE TO RESIDENTIAL AREAS

This issue deals with the concerns that the noise made by helicopters traveling from the Juneau Airport area to the Mendenhall Glacier could impact the quality of life for residents in the Mendenhall Valley, Fred Meyer, Auke Lake, Juneau Airport, and Lemon Creek areas.

## Effects Common to All Alternatives: Flight Path Noise.

The issue of noise impacts over residential areas arises primarily from Temsco flights to the Mendenhall Glacier, which fly over the Mendenhall Valley, Fred Meyer area, Auke Bay/Fritz Cove, and Lemon Creek areas. This analysis will focus on the impacts from the tours to the Mendenhall Glacier. Temsco was the only permit applicant authorized to land on the Mendenhall Glacier in 1994 and is the only company applying for permits to land there through 1999.

The locations of the twelve measurement sites have been described in Chapter 3 and are shown on Map 9. By discussing the results of the Sound Measurement Study of the sites closest to the flight paths which most affect the residential areas, this section can provide an estimate of the level of noise caused by helicopter landing tour traffic and the percent of the community highly annoyed for 1994 levels. Sound Measurements Sites 1-9 are closest to flight paths affecting residential areas. The sound measurements for these sites indicate an increase in the Percentage Highly Annoyed from helicopter noise from 0 to 3 percent with an average of 1.2 percent.

The Heintzleman Ridge flight path crosses the least amount of residential area and would have the least amount of effect on residences. The west route crosses over or near residential areas from the end of the airport runway, across Mendenhall Peninsula and Auke Bay. The valley route crosses the most residential area from the end of the runway then along Back Loop Road. This route also generates the most complaints from the public.

The following information is presented as representative of the effect of weather on flight paths. A "landing" refers to one helicopter landing on the Juneau Icefield. A

"flight" refers to one helicopter flying from its base heliport to the Icefield and a return to the heliport.

In the Draft Environmental Impact Statement (DEIS) a load factor of 5.5 passengers per helicopter was used to determine the number of landings for each alternative. Also, an estimate was used for the 1994 number of landings because the final use figures were not available. Using comments received on the DEIS and the final 1994 use figures received from the three helicopter companies, the 1994 actual number of landings authorized was 11,647 with a load factor of 5.37 passengers per helicopter for Temsco Helicopters and Era Helicopters and 4.00 for Coastal Helicopters. Using comments received from Temsco, an adjustment was made to their proposal using the 5.37 load factor. The total adjustment for accuracy between the information displayed in the DEIS and this document is an increase of 371 landings for the 1994 actual use and a decrease of 69 landings for the 1999 proposed total use for all three companies. To provide a more accurate comparison of alternatives, these numbers have been adopted in this document.

In 1992, a "bad weather year," 61 percent of Temsco's 5,587 landings (using 5.37 passengers per helicopter) at the Mendenhall Glacier flew the Heintzleman Ridge route, 30 percent the western route, and 9 percent the Valley route. In 1993, a "good weather year" 71 percent of their 5,587 landings (using 5.37 passengers per helicopter) flew the Heintzleman ridge route, 17 percent flew the western route, and 12 percent flew the Valley route (Temsco, 1994). See Map 7.

#### Alternative A - No Action

With Alternative A - No Action, special use permits would not be issued to the helicopter tour companies and they would not be authorized to land on the Juneau Icefield. The companies have indicated that, without the permits, they would continue to provide the tours as flightseeing rather than landing tours. They would fly over the icefield without landing. The Forest Service has no iurisdiction over heliport operations or flight paths. The number of flights would likely strive to meet market demand and may be similar to the number shown in Alternative B - Proposed Action. Current flight paths may be expanded as tour operators seek to make flightseeing tours equal to the quality of landing tours by seeking unique visual opportunities. The effects of noise on residents could be similar to Alternative B -Proposed Action, which by 1999 has a maximum of 22,221 landings on the Icefield.

It is also possible that, without landings, interest in the helicopter tours would be less than the companies' anticipated demand. This could result in a lower number of flights than the proposed action.

The two agencies that would continue to have jurisdictions that could regulate the helicopter tours are the Federal Aviation Administration and the City and Borough of Juneau. The FAA's jurisdiction involves the safety and management of all aircraft within the airport influence zone, a three-nautical-mile radius from the Juneau Airport. (See Map 8.) FAA also requires a minimum flying height of 300 feet above residential areas (FAA, 1994). This is the only elevation restriction imposed by FAA. The CBJ manages the Juneau Airport facilities and has the authority to impose ordinances related to noise limits within the CBJ. There are currently no CBJ ordinances that limit noise levels for aircraft.

#### Alternative B - Proposed Action

In 1994, Temsco had 5,587 landings (using 5.37 passengers per helicopter) for their Mendenhall Glacier Tours. The helicopters traveled to the landing sites in groups of five. With this alternative, this would increase to 7,449 landings in 1998 and 1999. In a 140-day season, this would be an average of 13 more individual landings per day. Using the average of the percentages flown for the 1992 and 1993 seasons, the number of landings expected for the three routes flown to the Mendenhall Glacier is shown on Table 4-2.

Residents in the vicinity of these three flight paths would see an increase of 33 percent in the number of flights between 1994 and 1999. As shown in Table 4-2, the actual increase in number of flights would vary from 1,229 per year for the Heintzleman Ridge route, an average of nine more flights per day, to 186 per year for the Valley route, an average of one more flight per day by 1999.

The number of landings from Temsco's Glacier Explorer Tour, which has one to two aircraft per tour, would increase from 2,000 in 1994 to the proposed 5,959 landings in 1999. This is the total of Temsco's landings less the landings for the Mendenhall Tour. This would increase the number of flights on the routes shown on Map 2. This would impact the residents from the end of the runway across to Mendenhall Peninsula on to Auke Bay. This impact would be from the sound of helicopters usually in groups of two, which would be of shorter duration, thus less impacting than the groups of five. This impact of two helicopters every one and one-half hours plus the groups of five every twenty-five minutes would be similar to the existing condition except there would be more hours and more days when this would be occurring. On average, there would be 23 more flights per day from the Explorer Tour.

| ALTERNATIVE B  TABLE 4-2 – Number and Distribution of Landings for Three Routes to Mendenhall Glacier (Based on 92-93 average) |              |              |              |              |              |              |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|
| ROUTE USED   | 1994         | 1995         | 1996         | 1997         | 1998         | 1999         |  |
| Heintzleman Ridge<br>(66%)   | 3,687        | 4,179        | 4,425        | 4,670        | 4,916        | 4,916        |  |
| West Route (24%)   | 1,341        | 1,519        | 1,609        | 1,698        | 1,788        | 1,788        |  |
| Valley Route (10%)   | 559          | 633          | 670          | 708          | 745          | 745          |  |
| Total Landings   | <u>5,587</u> | <u>6,331</u> | <u>6,704</u> | <u>7,076</u> | <u>7,449</u> | <u>7.449</u> |  |
| Average Landings per day   | 40           | 45           | 48           | 51           | 53           | 53           |  |

Coastal Helicopters would increase their landings on the Juneau Icefield by 468 per year from 1994 to 1999 (using 4.0 passengers per helicopter). Coastal's flights follow a route similar to Temsco's Explorer Tour and also uses one to two helicopters per tour. This impact would be negligible on its own, but the effects would be cumulative when added to the impacts from the other tours. Coastal's tours would add an average of three flights per day over Mendenhall Valley.

Era Helicopters would increase their landings on the icefield from 4,003 in 1994 to 9,033 in 1999. Their flights are up Gastineau Channel and Salmon Creek and back through Sheep Creek and cross the fewest amount of residential areas. This 125 percent increase would result in 36 more landings per day. The impacts from these flights would be to Douglas Island and Downtown Juneau along Gastineau Channel. The sound levels would not increase from each group of helicopters flying over these areas but there would be more flights per day. The effects would not be cumulative with the other flights because they fly different routes than Temsco and Coastal

but would add to the floatplane traffic in Gastineau Channel.

The overall effect of this alternative would be to increase the total number of helicopter landings from the 1994 level of 11,647 to 22,221 landings in 1999, for an increase of 10,574 landings (using 5.37 passengers per helicopter). On average, this would mean 75 additional landings per day for all tour companies, for a total of 158 landings per day. This increased helicopter traffic would raise the percent of individuals highly annoyed by helicopter noise.

#### Alternative C – Authorize Current Level of Helicopter Landings Through 1999

The impacts from this alternative would be a continuation of those generated by the flights in 1993 and 1994 since the number of landings would be the same. The number of flights and flight paths flown in 1994 are shown in Table 4-3.

| ALTERNATIVE C TABLE 4-3 – NUMBER AND DISTRIBUTION OF FLIGHTS FOR THREE ROUTES TO MENDENHALL GLACIER (BASED ON 1992 AND 1993 AVERAGE) NUMBER OF FLIGHTS AND PATHS FOR 1994 |              |                      |  |  |  |  |
|---|--------------|----------------------|--|--|--|--|
| ROUTE   | 1994 FLIGHTS | 1995-1999 (ANNUALLY) |  |  |  |  |
| Heintzleman Ridge (66%)   | 3,687        | 3,687                |  |  |  |  |
| West Route (24%)  | 1,641        | 1,341                |  |  |  |  |
| Valley Route (10%)  | 559          | 559                  |  |  |  |  |
| Total Flights   | 5,887        | 5,587                |  |  |  |  |
| Average flights per day   | 40           | 40                   |  |  |  |  |

The impacts for residents in the vicinity of these three flight paths would be the same for 1995 through 1999 as those flown in 1994. On average, with a 140 day season, there would be 40 flights with five helicopters. This would not change with the different routes flown. The Heintzleman Ridge flight path crosses the least amount of residential area and would have the least amount of effect on residences. The west route crosses over or near residential areas from the end of the airport runway, across Mendenhall Peninsula and Auke Bay. The valley route crosses the most residential area from the end of the runway then along Back Loop Road. This route also generates the most complaints from the public. The impacts for all three routes would remain the same as for 1994.

The number of landings from Temsco's Explorer Tour would also stay the same as in 1994, 2,000 landings, or an average of 14 landings per day (seven icefield trips of two helicopters per trip). The impact to residents from the end of the runway across to Mendenhall Peninsula on to Auke Bay from this tour would stay the same. This noise impact is from helicopters usually in groups of two, which would be less impacting than the groups of five.

Coastal Helicopters landings would also stay the same at 57 per year (at 4.0 persons per helicopter) or an average of one flight every other day. This impact would be negligible on its own but would add to the impact from the flights from other tours.

Era Helicopters landings would stay the same at 4,003 per year or an average of 29 landings (using 5.37 passengers per helicopter) per day. Their flights are up Gastineau Channel and Salmon Creek and back through Sheep Creek and cross the least amount of residential areas.

Under this alternative, the percentage of people highly annoyed would be less than Alternative B – Proposed Action, because there would not be as many flights and there would be fewer days with flights.

This alternative would not change the current number of helicopter landings (11,647) or average landings per day of 83 for all three companies.

| ALTERNATIVE D  TABLE 4-4 – NUMBER AND DISTRIBUTION OF LANDINGS FOR THREE ROUTES TO MENDENHALL GLACIER  (BASED ON 1992 AND 1993 AVERAGE) |              |              |       |              |              |       |  |  |  |  |
|---|--------------|--------------|-------|--------------|--------------|-------|--|--|--|--|
| ROUTE USED  | 1994         | 1995         | 1996  | 1997         | 1998         | 1999  |  |  |  |  |
| Heintzleman Ridge (66%)   | 3,687        | 4,179        | 4,425 | 4,670        | 4,670        | 4,670 |  |  |  |  |
| West Route (24%)  | 1,341        | 1,519        | 1,609 | 1,698        | 1,698        | 1,698 |  |  |  |  |
| Valley Route (10%)  | 559          | 633          | 670   | 708          | 708          | 708   |  |  |  |  |
| Total Landings  | <u>5,587</u> | <u>6,331</u> | 6,704 | <u>7,076</u> | <u>7,076</u> | 7,076 |  |  |  |  |
| Average flights per day   | 48           | 54           | 57    | 60           | 60           | 60    |  |  |  |  |

#### Alternative D – Authorize a Mid-level Number of Landings Through 1999

This alternative would authorize special use permits as requested by the helicopter tour companies through 1997 but would limit the authorizations for 1998 and 1999 to 1997 levels.

The number of landings expected for the three routes flown to the Mendenhall Glacier is shown in Table 4-4. There would be an average increase of 19 helicopters per day over the 1994 level of 40 landings per day. Based on a five-helicopter flight, this would equal four additional round trips.

Residents in the vicinity of these three flight paths would find an increase in total landings of 27 percent from the number of landings in 1994 to those for 1999. As shown in Table 4-4, the actual increase in landings would vary from 983 per year for the Heintzleman Ridge route to 149 per year for the Valley route. This would peak in 1997 and remain the same through 1999.

The Heintzleman Ridge flight path crosses the least amount of residential area and would have the least effect on residents. The west route crosses over or near residential areas from the end of the airport runway, across Mendenhall Peninsula, and Auke Bay. The valley route crosses the most residential area from the end of the runway then along Back Loop Road. This route generates the most complaints from the public.

The number of landings (using 5.37 passengers per helicopter) from Temsco's Explorer Tour would increase from 2,000 in 1994 to 4,096 in 1997 but would be 1,118 less than the Alternative B – Proposed Action. This would increase the number of flights on the path shown on Map 4. This would also impact the residents from the end of the runway across to Mendenhall Peninsula to Auke Bay. This impact would be from helicopters usually in groups of

two, which would be of shorter duration, with less noise impact than the groups of five. This would be an average increase of 20 helicopters per day, with a 140-day season minus one day per weekend and three holidays.

Coastal Helicopters would increase the number of landings on the icefield by 269 landings per year from 1994 to 1997, or an average of two landings per day. This impact would be negligible on its own but would add to the impact from the flights from other tours, increasing the annoyance level as shown in the sound study.

Era Helicopters would increase the number of landings on the icefield from 4,003 in 1994 to 7,541 in 1997, or an average of 34 landings per day. This is a decrease of 1,492 in the number of landings over Alternative B – Proposed Action for 1999.

By not flying one weekend day per week, there would be an increase of eight landings per day for the rest of the week. The impacts to residential areas would also be reduced because icefield landings would not be authorized one weekend day per week. In addition, the holidays of Memorial Day, Independence Day, and Labor Day would also not have any glacier landings. Since these holidays tend to be a time of outdoor activities such as cookouts, this would give residents an extra day of quiet when they are most likely outdoors.

This alternative would increase the total number of helicopter landings from the 1994 level of 11,647 to 19,039 in 1999. Through 1999, this increase in helicopter activity would increase the number of people highly annoyed by helicopter noise. By losing one weekend day per week and the three summer holidays from a 140-day season, the average daily increase in the number of landings would be 78.

#### Alternative E - Satellite Heliport

With this alternative, a satellite heliport would be constructed out Glacier Highway between miles 25 to 28. The number of authorized icefield landings would remain the same as in the proposed action, but noise impacts to residential areas would decrease. There would be one flight over Lynn Canal of a group of helicopters to the satellite heliport in the morning and a return group in the evening.

There would be impact caused by construction of the facilities described in Chapter 2. These environmental impacts would be addressed in a separate analysis. There would be approximately five acres of land which would be cleared and developed for these facilities. This would require ground disturbance and tree removal.

The area between Mile 25 and Mile 28 is a valley of surface deposits from the Eagle and Herbert River systems. The area has essentially wet meadow types of plants with Sitka spruce islands. This area has a high water table. As glacial rebound (the rising of the ground) continues, stringers of spruce and hemlock are encroaching from the edge of the meadow area. The mountainsides facing the valley are hemlock and spruce forests typical of Southeast Alaska. Except for a few rolling hills leading into the meadow area, the mountainsides are very steep.

The flight paths would follow a direct route to the Icefield, up Eagle Glacier, which would avoid flights over Mendenhall Valley as shown on Map 5. During periods of low cloud cover, the flight paths would be along Glacier Highway back to the west route on the west side of Mendenhall Valley. The flights up Eagle Glacier would not impact residential areas. The flights up the west side of Mendenhall Valley would be the same percentages as for the proposed action (34 percent). The impacts from

flights along this route would also be the same as Alternative B - Proposed Action.

The impacts from Era's landings would be the same as for Alternative B – Proposed Action.

The number of helicopter landings that would be authorized under this alternative is 22,221 the same as Alternative B – Proposed Action. This alternative would base 13,007 of the landings from a location where the flight paths would not be in the vicinity of residential areas. This would lessen the number of individuals highly annoyed by helicopter noise.

## Alternative F - 1994 Level with Limited Hours and Days

The effects of this alternative would be similar to Alternative C – Authorize Current Level of Landings Through 1999 in terms of direct noise effects of helicopter overflights. The impacts would be slightly less, however, because in terms of duration of impacts, icefield landings and departures would be limited to the hours of 9 a.m. through 6 p.m. Landings now begin at 8:30 a.m., thus the flights would begin one-half hour later. Flights would be ending at 6 p.m. rather than at 9 p.m.

The impacts to residential areas would also be less because icefield landings would not be authorized one weekend day per week. Because companies could still schedule flightseeing tours on these days without landing, it is not certain that restricting icefield landings would substantially reduce noise related impacts to residents. In addition the holidays of Memorial Day, Independence Day, and Labor Day would also not have any glacier landings. Since these holidays tend to be a time of outdoor activities such as cookouts, this would give residents an extra day of quiet when they are most likely outdoors. However, to have the same number of landings as 1994, by not landing weekends and

holidays, on average, there would be 30 more landings per day to make up this difference.

#### Alternative G – Authorize a Mid-level Number of Landings Through 1999 with Landing-free Zones

This alternative would authorize the same number of landings as Alternative D - Authorize a Mid-level Number of Landings Through 1999, but landings could occur seven days a week rather than six. The hours would also be expanded to 8:30 a.m. to 8 p.m. from 9 a.m. to 7 p.m. (see Tables 2-17, 2-18, 2-19 and 2-20).

Consequently, the effects of this alternative would be the same as Alternative D - Authorize a Mid-level Number of Landings Through 1999 except that there would not be one weekend day without landings. The number of flights would likely be the same because under Alternative D, flightseeing tours could still occur on the weekend day without landings. Under Alternative G, the average number of landings per day would be slightly less than Alternative D, because the same number of landings would occur over 140 days rather than 117. The average daily landings would then be 53 rather than 78. As in Alternative C, landings would not be permitted on the Eagle Glacier, Death Valley, and Twin Glacier Zones. Point to point landings would not require a permit and would still be allowed. This would lessen the noise impact in these areas from those of Alternative D – Authorize a Mid-level Number of Landings Through 1999. Flight paths to these Zones are similar to those in Alternative D and so the noise impact over residential areas would be the same as that Alternative.

## C. ISSUE 2 – NOISE AND VISUAL DISTURBANCE TO GROUND-BASED RECREATION USERS.

This section will analyze the affects of the seven alternatives on the recreation experience of visitors in the vicinity of the helicopter flight paths. Recreation activities identified in scoping include: camping, hiking, picnicking and viewing scenery. The effect of helicopters traveling in the vicinity of these activities is the interruption of solitude caused by the noise of the aircraft.

By examining the results from the sound study of the sites closest to the flight paths which most affect the trails and areas identified as recreation sites impacted by noise (Sites 1, 3, 4, 5, 6, 10, 12; Table 4-1), this section provides an estimate of the level of noise caused by helicopter landing tour traffic in 1994. This noise is the effect to recreation visitors using the trails and sites described below. For this analysis of consequences, the Percent of Persons Highly Annoyed (Graph 4-1) taken from the noise study for the sites listed are considered to be the percent of visitors who have had the solitude and quiet of their recreation experience impacted by the noise from helicopter landing tours at the 1994 level. It can be expected that an increase in the number of helicopters traveling to landing sites along flight paths described on Maps 2, 3, and 4 would increase the percent of recreation visitors highly annoyed by this activity

For all alternatives, there would be no human health or safety effect from the helicopter tours (USDA Forest Service, 1994a). Recreationists' responses would range from very annoyed to tolerant of the helicopter flights (Graph 4-1). The level of annoyance would be higher in areas of more solitude and lower in high use areas which have a high level of background noise

such as the Mendenhall Glacier Recreation Area (USDA Forest Service, 1994a).

For all alternatives, it is possible that the helicopter companies would still conduct helicopter flightseeing tours in addition to helicopter landing tours. This could further impact recreation visitors.

For this issue, the following recreation trails and places are identified as areas where helicopter landing tour flights may affect the recreation visitor:

North Area - High Solitude Area (from Auke Mountain to the northern end of the Juneau Icefield Study Area):

(a) Auk Nu Trail, Spaulding Meadows Trail, Mt. McGinnis Path, Peterson Lake Trail. (these trails are on National Forest System lands).

Valley Area - Low Solitude Area (Zone 4, Mendenhall Glacier):

(a) West Glacier Trail, Trail of the Glacier, East Glacier Trail, Steep Creek Trail, Moraine Ecology Trail, Dredge Lakes Area Trails, Nugget Creek Trail, Heintzleman Ridge Trail, Montana Creek Trail, Mendenhall Glacier Recreation Area (including Mendenhall Glacier Visitor Center, and Skater's Cabin), Steep Creek Area, and Mount

McGinnis (these trails and areas are on National Forest System lands)

South Area - Low Solitude in the Lemon Creek Area, High Solitude in the areas south of Thane (from Lemon Creek area to the southern end of the Juneau Icefield Study Area):

- (a) Point Bishop Trail, Lemon Creek Trail (portions of these trails are on National Forest System lands),
- (b) Salmon Creek Road and trail, Granite Creek Trail, Blackerby Ridge, Perseverance Trail, and Sheep Creek Trail (these trails and areas are not on National Forest System lands).

High solitude areas are those trails and areas estimated to receive up to fifty persons per day during the summer months. Low solitude areas and trails are those estimated to receive more than fifty persons per day during the summer months.

The types of uses conducted on these trails are: bicycling, hiking, jogging, off road vehicle use, snowmobile use, viewing scenery and wildlife, and hunting.

The following table indicates the average daily flights over the areas described in the introduction to this section (Issue 2) and can be used to compare the helicopter impact of the seven alternatives:

| Table 4-5   | Ave | erage Daily | / Flights in |     |     |     |     |
|-------------|-----|-------------|--------------|-----|-----|-----|-----|
| Area        | А   | В           | С            | D   | E   | F   | G   |
| North Area  | 0   | 28          | 8            | 26  | 93  | 10  | 22  |
| Valley Area | 0   | 53          | 40           | 61  | 13  | 48  | 50  |
| South Area  | 0   | 78          | 35           | 76  | 53  | 42  | 64  |
| Totals      | 0   | 159         | 83           | 163 | 159 | 100 | 136 |

<sup>&</sup>lt;sup>1</sup> Average daily flights adjusted for reduced landing days per week and holidays

#### Alternative A - No Action

With this alternative, special use permits would not be issued to helicopter companies for guided tours landing on glaciers in the Juneau Icefield. This could result in the helicopter companies conducting flightseeing tours which would not land and which would not be regulated by a special use permit from the Forest Service.

The Forest Service does not have jurisdiction over the airspace above the Juneau Icefield, these flights would be regulated by FAA and the CBJ. FAA does regulate flight paths and elevations within the Juneau Airport Control Zone; CBJ has the authority to regulate noise limits within the city and borough boundaries. Currently there are no CBJ ordinances that limit noise for aircraft, only disturbing the peace ordinances which have not been applied to helicopters. Flights could occur without permits or involvement from the Forest Service.

The number of flights would likely not be regulated and would probably equal the demand. This demand can be estimated by the current helicopter companies proposal. Therefore, the number of flights possible under this alternative would likely be equal to Alternative B - Proposed Action.

It is also possible, however, that without landings, interest in helicopter tours would be less than the companies' anticipated demand. This could result in a lower number of flights than the proposed action.

FAA requires a minimum flying height of 300 feet above residential areas. This would be the only constant elevation limitation on flightseeing tours. Regardless of the number of flights, it is likely that flight paths and elevations would not be regulated on a regular basis, only occasionally to alleviate congestion within the airport control zone as is done for all aircraft within this area. However, many of the

commercial operators have worked out voluntary routes and altitudes to mitigate noise in the vicinity of the airport; use of these routes by some helicopter companies would likely continue.

The effects of noise from helicopters on recreation users, particularly those traveling East and West Glacier Trails, Nugget Trail, Montana Creek Trail and Heintzleman Ridge Trail, Point Bishop Trail, Perseverance Trail, Salmon Creek Road and Trail, Spaulding Meadow Trail, Auk Nu Trail, Mendenhall Glacier Recreation Area, Steep Creek Trail, would likely be equal to or higher than the effects from Alternative B - Proposed Action. This is because the helicopter flightseeing tours would not be regulated at as great an extent with regards to elevations, routes, and destinations, since without the landings, the Forest Service would not be making recommendations through the special use permits.

If landing permits are not authorized, the tours would continue as helicopter flightseeing tours to the Juneau Icefield and would not be limited. Therefore, the frequency of events where helicopters are heard from recreation sites would likely increase over the 1994 level.

#### Alternative B – Proposed Action

For this alternative, the recreation trails and places identified in the introduction for this issue are identified as possible areas where helicopter landing tour flights may affect the recreation visitor: The effect of helicopter noise on recreation visitors can be measured by the extent of the noise for the north, valley, and south areas as described in Table 4-5.

The flight paths which most impact the trails and recreation places mentioned above are those used by Temsco Helicopters which access Mendenhall Glacier; Era flight paths to Taku, Norris, and Twin Glaciers; and Coastal

Helicopter flight paths to Taku, Norris, Gilkey, and Eagle Glacier (see Maps 2, 3, and 4). This alternative would authorize an increase in the number of helicopters per day flying to and from these glaciers at the levels described in Table 4-5.

In Alternative B – Proposed Action, the number of helicopters traveling on the flight paths described above would increase by 82 percent or roughly 1¾ times the 1994 use. This means that the number of hours which recreation visitors are highly annoyed would increase by that amount. More use would mean longer flight hours and more trips during the current helicopter flight periods. This alternative would cause the greatest number of recreationists to be highly annoyed by noise and affect the solitude and quiet of these recreationists the most of the seven alternatives.

#### Alternative C – Authorize Current Level of Helicopter Landings Through 1999

This alternative would authorize helicopter tour landings up to the level approved for 1994.

For this alternative, the recreation trails and places identified in the introduction for this issue are identified as areas where helicopter landing tour flights may affect the recreation visitor: The effect of helicopter noise on recreation visitors can be measured by the extent of the noise for the north, valley, and south areas as described in Table 4-1 and 4-5.

Under this alternative the number of helicopters using the northern, valley and southern flight paths would be equal to the 1994 level as described in Table 4-5. The effects to recreation users of helicopter landing tours through 1999 would remain equal to the effects on these areas which occurred in 1994.

#### Alternative D – Authorize a Mid-level Number of Landings Through 1999

This alternative would limit the proposed increase of helicopter landings to the levels requested by the helicopter tour companies for 1997. Landing times would be limited to 9 a.m. to 7 p.m. Helicopter landing tours would not be permitted one weekend day per week nor on the three summer holidays.

For this alternative, the recreation trails and places identified in the introduction for this issue are identified as areas where helicopter landing tour flights may affect the recreation visitor: The effect of helicopter noise on recreation visitors can be measured by the extent of the noise for the north, valley, and south areas as described in Table 4-5. The increase in the number of helicopter landings per day for this alternative over the 1994 level is described in Table 4-5.

In this alternative, for 1997, the number of helicopters traveling on the flight paths described in Table 4-5 for the northern, valley, and southern areas would increase by 80 percent over the 1994 use. This would be an average increase of 66 helicopter flights per day. This means that the number of hours which recreation visitors are highly annoyed would increase by that amount as more use would mean longer flight hours and more trips during the current helicopter flight periods. After 1997, this level would remain constant through 1999.

This alternative would increase the number of helicopter flights causing more noise and affect the solitude and quiet of recreationists more than Alternative C – Authorize Current Level of Landings Through 1999 and Alternative F – 1994 Level with Limited Hours and Days. However, this effect would be less than the other four alternatives because the number of helicopters traveling to glacier landing sites, and the noise effect to recreation visitors traveling

the areas described in this section, would not increase after 1997.

This alternative includes one weekend day a week and the three summer holidays when no helicopter landing tours would be permitted and limited operating hours during the rest of the week. A recreation visitor could plan a visit during these off times and would then be much less impacted.

#### Alternative E - Satellite Heliport

Under this alternative, the number of helicopter landings would be the same as Alternative B -Proposed Action except that a satellite heliport for flights to Mendenhall Glacier would be constructed along Glacier Highway between miles 25 and 28. There would be impact caused by construction of the facilities described in Chapter 2. These environmental impacts would be addressed in a separate analysis. There would be one flight from the existing heliport to the satellite heliport in the morning and a return group in the evening. These flights would travel over Lynn Canal. Flights would still use Mendenhall Valley routes during bad weather so some of the same trails discussed in Alternative B would be impacted. Table 4-2 shows how often these routes would be used.

Because there are presently no helicopter landing tours originating from this vicinity, the Helicopter Sound Study did not take any measurements in this area. Sound measurements at remote trails sites (Sites 3, 10, & 12) in the Mendenhall Valley would be representative of this area.

The trails and recreation sites affected by helicopter flight paths from heliports in this area would be: Peterson Lake Trail, Herbert Glacier Trail, Amalga Trail, Eagle Beach, Windfall Trail, and Eagle Glacier Cabin. These trails and sites are less used than those described in the proposed alternative, therefore, overall noise

impact from helicopter landing tours would impact fewer recreation visitors. These areas, however, are areas of high solitude and would likely have low background noise. Helicopter flights to landing sites traveling over these areas would likely result in a larger increase over background noise than the low solitude areas. This would increase the number of recreation visitors highly annoyed. The number of helicopters traveling the flight paths would be the same as the proposed action and as described in Table 4-5...

## Alternative F – 1994 Level with Limited Hours and Days

This alternative would be the same as Alternative C - Authorized Current Level of Landings Through 1999, except that landing tour hours would be limited and no tours would be allowed on one weekend day each week and summer holidays. This would result in an increase of 30 helicopter flights per day.

It is possible that the helicopter companies would still conduct flightseeing tours during the weekend days and holidays without landings. This could impact recreation visitors.

For this alternative, the recreation trails and places identified in the introduction for this issue are identified as possible areas where helicopter landing tour flights may effect the recreation visitor. The effect of helicopter noise on recreation visitors can be measured by the extent of the noise for the north, valley, and south areas by increase in number of flights per day, as described in Table 4-5.

This alternative would have the least negative impact of all seven alternatives on recreation users feeling of solitude and quiet. The use level is the same as Alternative C - Authorize Current Level of Landings Through 1999, and so the analysis of noise disturbance from helicopters to recreationists would be the same. The mitigating

factors are: off hours and one weekend day per week plus holidays without landing tours. This would allow hikers and picnickers to plan a day where they could hike and picnic and would not have landing tours occurring on the flight paths. These mitigations make this alternative the least impacting to recreation users of the seven alternatives, although flightseeing tours could occur in order to meet demand.

Recreation users would range from very annoyed to tolerant of the helicopter flights. The level of annoyance would be higher in areas of more solitude and lower in high use areas such as the Mendenhall Glacier Visitor Center.

#### Alternative G – Authorize a Mid-level Number of Landings Through 1999 With Landing-Free Zones

This alternative would limit proposed increase to approximately the same levels as Alternative D - Authorize a Mid-level Number of Landings Through 1999. Landings would not be authorized in Zone 2–Eagle Glacier, Zone 6–Death Valley, and on Zone 9–Twin Glacier. Landings would be allowed from 8:30 a.m. to 8 p.m. seven days a week.

The trails impacted by the helicopter landings described in this alternative would be the same as those described in the introduction to this issue. Under this alternative, in Zone 2-Eagle Glacier, Zone 6-Death Valley, and Zone 9-Twin Glacier only point-to-point landings would occur, there would be no guided helicopter landing tours authorized. The effect of not having guided tours for these areas would be that recreation visitors could visit these areas with only minimal contact with helicopters. For Eagle Glacier Trail, Point Bishop Trail, Perseverance Trail, Spaulding Trail, Auk Nu Trail, and Peterson Trail there would be fewer helicopter landing tour overflights. The recreation visitors highly annoyed by helicopter sound while they are traveling trails other than

these would be the same as Alternative D - Authorize A Mid-level Number of Landings Through 1999.

#### D. ISSUE 3 - WILDLIFE

Mountain goat populations in Southeast Alaska are dispersed and low density. Subpopulations occupy relatively small patches of habitat. The small size and patchy distribution of groups creates a higher potential for in-breeding or periodic local extinctions (Smith & Raedeke, 1982). These dynamics of goat populations must be considered in assessing additional stresses to populations that may occur as a result of helicopter activity.

Mountain goat home ranges are relatively small. Studies of 28 radio-collared mountain goats in Southeastern Alaska show that year round home ranges are usually from 10 to 20 square kilometers (Fox, et al., 1989). Seasonal range attachment to sites is high. Preferred sites are used year after year. Attachment to sites used in summer is higher than winter (Fox, et al., 1989). Mountain goats prefer steep, rugged terrain (Brandborg, 1955; Rideout & Hoffman, 1975) and this preference is generally explained as predator avoidance (Fox & Streveler, 1986; Rideout & Hoffman, 1975).

Mountain goats spend 60 percent of daylight hours within or at the edge of escape terrain in summer (Fox, 1983; Schoen & Kirchoff, 1982; Smith, 1985). Mountain goats near Juneau use rock outcrops, alpine tundra, subalpine forest, and shrub land habitat types predominantly during summer (Schoen & Kirchoff, 1982). Assuming nighttime bedding in escape terrain, the longer period of daylight in summer means that mountain goats spend substantially more time outside escape terrain than in winter (Fox, et al., 1989). Smith (1985) reported that 95 percent of all relocations of radio-collared

mountain goats in Southeast Alaska were within 1,300 feet of cliffs which could be used as escape terrain.

A Habitat Capability Model was developed by the USDA Forest Service and Alaska Department of Fish and Game in 1988 for the Tongass Land Management Plant Revision. The model uses topographic features (steep escape terrain) and habitat features (old growth forests on southerly aspects within 1,300 feet of escape terrain) from Forest Service Geographic Information System (GIS) databases to estimate the capability of habitats to support mountain goat populations. The circles on Maps 11a-11w show habitats in the area of analysis capable of supporting mountain goat populations. The circles actually indicate areas within 1,300 feet of suitable escape terrain. Helicopter flight paths are also indicated on Maps 11a-11w.

Biologists have not reached consensus regarding the effect of human disturbance on animal distribution over long periods of time (Smith, 1986). Research has indicated that human activity can displace mountain goats from portions of otherwise undisturbed habitat. Chadwick (1973) found that in western Montana mountain goats abandon habitat temporarily as a result of road building activities. In Glacier National Park, Singer (1975), found that mountain goats demonstrated some habituation to noise and human disturbance, however loud construction activities caused mountain goats to restrict their use of previously used areas.

Foster and Rahs (1983) analyzed mountain goat response to hydroelectric exploration activities and found that a buffer zone of a two kilometer radius was required to prevent an overt response to human activity. A major concern for mountain goat management is increased human presence resulting in mountain goat disturbance, increased legal harvest and illegal harvest (Phelps, 1983; Quaedvlieg, et al., 1973).

The behavior of wildlife has been used to assess the influence of human activities (Hicks & Elder, 1979; Berger, et al., 1983; King & Workman, 1986). Because ungulates (hoofed mammals) devote a high percentage of time to feeding and foraging behavior, time budgets (documentation of the percentage of time spent in a variety of activities) are important parameters to evaluate disturbance. Long-term disturbances may lead to acute or chronic reduction in foraging efficiency (Berger, et al., 1983; King & Workman, 1986).

The percentage of time spent feeding does not seem to be different inside or outside of escape terrain (Fox, 1983); however, the forage intake rate is probably much greater in the dense vegetation outside escape terrain. The percentage of time mountain goats spend feeding or searching for food increases with distance from escape terrain (McFetridge, 1977) probably because feeding is the only incentive for being away from the escape terrain. The relative amount of feeding time may decrease slightly with distance because of an increase of time devoted to keeping alert to the presence of predators (Risenhoover, 1981).

Stockwell, et al. (1991) conducted time budget studies of big horn sheep at Grand Canyon National Park where helicopter traffic ranges from 15,000 to 42,000 flights per year. This study and others (Altman, 1958; Berger, et al., 1983; Krausman & Hervert, 1983; Knight & Knight, 1984; Miller & Smith, 1985; and Krausmann, et al., 1986) indicated that the degree of disturbance was a function of the proximity of the aircraft. Heart rates of Rocky Mountain bighorn sheep (Ovis canadenisis canadensis) did not respond to high flying aircraft (over 400 meters) but did respond to low flying aircraft (90 to 250 meters) by running, which increased heart rates by three to five times (MacArthur, et al., 1979, 1982). Helicopters at low altitude caused a notable

reduction in foraging efficiency in the Grand Canyon study (Stockwell, et al., 1991).

Another study (Bleich, et al., 1994) warned scientists to be concerned about the effects of helicopter activity on the condition and reproductive success of large mammals. Nutritionally stressed individuals may be especially susceptible to disturbance from helicopter activity which causes them to depart from prime habitats for extended periods. Data presented by Krausmann and Hervert (1983) also support this. The effects of such disturbance would be exacerbated for mountain goats living in environments where critical resources are limited and widely distributed (Bleich, et al., 1994). Mountain goat movements resulting from disturbance also have the potential to make them vulnerable to predation.

Management recommendations resulting from the Stockwell, et al. (1991) study include minimizing impacts by restricting the number of flights and by regulating the flight altitudes of helicopters. Flight altitudes of at least 400 to 500 meters were recommended to minimize impacts. Fox, et al. (1989) recommended that helicopter activity near cliff areas used by female goats for birthing (kidding) and early neo-natal periods be avoided. These studies provide the basis for the proposed mitigation of all the action alternatives.

#### Alternative A - No Action

Helicopters would no longer be authorized to land on National Forest System lands.
Helicopter companies could continue tours as flightseeing tours with no glacier landings. The Forest Service would then have no jurisdiction and would not recommend flight paths over National Forest Lands or suggest mitigation to minimize wildlife impacts. Flights would be unrestricted and could fly in close proximity to wildlife. Therefore, this alternative has the

potential to have the greatest impact on wildlife of the seven alternatives.

This alternative also has the potential to decrease noise and disturbance impacts to wildlife if tour numbers decreased due to decreased tourist demand for tours without glacier landings. If this were to occur - which is not expected - this alternative would have the least impact.

#### Alternative B - Proposed Action

Increasing the numbers of flights along current flight paths would have less impact to wildlife than increasing helicopter use in areas that currently receive low numbers of helicopter icefield tour landings (Gilkey, Herber, Lemon, Taku and Hole-in-the-Wall Glaciers, and the Backcountry), or no helicopter icefield tour landings (Eagle and Twin Glaciers, and Death Valley).

Mendenhall and Norris Glaciers currently experience the greatest number of helicopter icefield tour landings. Under this alternative, use on the Mendenhall Glacier increases 33 percent over the next five year. Norris Glacier use increases 104 percent. Forest Service biologists have observed mountain goats in high helicopter use zones (Mt. Bullard, Mt. McGinnis near the landing site on Mendenhall Glacier). Mountain goats in these areas appear to have adapted to the regular, somewhat predictable helicopter activity typical of icefield tours as long as the activity is consistent with mitigation recommended in Chapter 2, Mitigation (minimum 1500 feet vertical and horizontal clearance, see Migation Chapter 2). The information that is lacking in this example, however, is distribution and abundance data prior to the beginning of icefield tours. We cannot, because of the lack of this information, provide a before and after assessment of how mountain goats redistributed or changed in abundance when icefield tours began on the

Mendenhall and Norris Glaciers. A literature review (Environmental Consequences, Section D. Issue 3 - Wildlife, pp. 4-18 through 4-19), indicates that mountain goats and other ungulates move away from helicopter and other disturbances associated with machines and humans.

Under this alternative, icefield landings on Gilkey Glacier and in the Backcountry would increase 294 percent, 193 percent on Herbert Glacier, 104 percent on Taku and Hole-in-the-Wall Glacier, and 33 percent on Lemon Glacier. New helicopter icefield tour landings would occur on three glaciers in zones currently classified as no-use zones (Eagle and Twin Glaciers and Death Valley. There is a greater potential to have an impact on wildlife in these areas. Wildlife may discontinue or shift their use of preferred habitat as a result of increased helicopter activity associated with icefield tour landings in new area. There is not concensus among biologists regarding long-term impacts to populations (changes in abundance, decreases in long-term productivity, etc.) as a result of movement from preferred habitat as a result of increased helicopter disturbance.

Maps 11a-11w show how recommended flight paths interact with predicted mountain goat habitat use areas. In most cases, the flight paths are a sufficient distance from predicted habitat use areas to minimize disturbance. When flight paths overlap with predicted habitat use areas, mitigation measures described in Chapter 2, Mitigation, will minimize disturbance impacts.

#### Alternative C – Authorize Current Level of Landings Through 1999

Maintaining 1994 helicopter activity levels without entering no-use zones designated in the 1987 EA would cause no additional impacts to wildlife provided mitigation (as described in Chapter 2, Mitigation) is followed.

#### Alternative D – Authorize Mid-level Number of Landings Through 1999

Increasing the numbers of flights along current flight paths would have less impact than increasing helicopter use in areas that currently receive low numbers of helicopter icefield tour landings (Gilkey, Herbert, Lemon, Taku and Hole-in-the-Wall Glaciers, and the Backcountry), or no helicopter icefield tour landings (Eagle and Twin Glaciers, and Death Valley).

Mendenhall and Norris Glaciers currently experience the greatest number of helicopter icefield tour landings. Under this alternative, use on the Mendenhall Glacier would increase 27 percent over the next five year. Norris Glacier use would increase 73 percent. Forest Service biologists have observed mountain goats in high helicopter use zones (Mt. Bullard, Mt. McGinnis near the landing site on Mendenhall Glacier). Mountain goats in these areas appear to have adapted to the regular, somewhat predictable helicopter activity typical of icefield tours as long as the activity is consistent with mitigation recommended in Chapter 2, Mitigation (minimum 1500 feet vertical and horizontal clearance, see Migation Chapter 2). The information that is lacking in this example, however, is distribution and abundance data prior to the beginning of icefield tours. We cannot, because of the lack of this information, provide a before and after assessment of how mountain goats redistributed or changed in abundance when icefield tours began in the Mendenhall and Norris Glacier areas. A thorough literature review (Environmental Consequences, Section D. Issue 3 - Wildlife, pgs. 4-18 through 4-19) indicates that mountain goats and other ungulates move away from helicopter and other disturbances associated with machines and humans.

Under this alternative, icefield landings on Gilkey Glacier and in the Backcountry would

increase 217 percent, 118 percent on Herbert Glacier, 55 percent on Taku and Hole-in-the-Wall Glacier, and 16 percent on Lemon Glacier. New helicopter icefield tour landings would occur on three glaciers in zones currently classified as no-use zones (Eagle and Twin Glaciers and Death Valley). There is a greater potential to have an impact on wildlife in these areas. Wildlife may discontinue or shift their use of preferred habitat as a result of increased levels of helicopter activity. There is not concensus among biologists regarding long-term impacts to populations (changes in abundance, decreases in long-term productivity, etc.) as a result of movement from preferred habitat as a result of increased helicopter disturbance.

Maps 11a-11w show how recommended flight paths interact with predicted mountain goat habitat use areas. In most cases, the flight paths are a sufficient distance from predicted habitat use areas to minimize disturbance. When flight paths overlap with predicted habitat use areas, mitigation measures described in Chapter 2, Mitigation, will minimize disturbance impacts.

Helicopter landings would be restricted to the time between 9 a.m. and 7 p.m.

Time restrictions would decrease the number of hours during the day when helicopter landing activity would occur. For wildlife species that are most active in the morning and evening periods this would provide a window of time when activities would not be disrupted or disturbed by helicopter activity.

#### Alternative E - Satellite Heliport

In addition to the effects to wildlife described for Alternative B - Proposed Action, this alternative would impact and are (the Eagle and Herbert River watershed) that currently experiences low to moderate levels of helicopter use. The Eagle and Herbert River corridor is

noted for its habitat diversity and species richness. Brown bear, wolves, many songbird species, raptors, waterfowl, marten, river otter, and wolverine are among the species recorded in this area. Mountain goats, brown bears, wolverines, and wolves are also found at higher elevations in areas adjacent to Eagle and Herbert Glaciers and the icefield. Many of these species are sensitive to helicopter activity. This river corridor would become the primary access for most helicopter tour activity resulting in extremely concentrated, heavy helicopter traffic. This increase in activity would have the highest potential of any alternative to cause negative impacts to wildlife (impacts described for Alternative B plus those described above).

## Alternative F – 1994 Level with Limited Hours and Days

Maintaining 1994 helicopter activity levels without entering no-use zones designated in the 1987 EA would cause no additional impacts to wildlife provided mitigation (as described in Chapter 2, Mitigation) is followed. In addition, some effects might be further mitigated by decreasing the number of hours in a given day when helicopters would land. Helicopter landings would be restricted to the time between 9 a.m. and 6 p.m. Time restrictions would decrease the number of hours during the day when helicopter landing activity would occur. For wildlife species that are most active in the morning and evening periods this would provide a window of time when activities would not be disrupted or disturbed by helicopter activity.

#### Alternative G – Authorize Mid-level Number of Landings Through 1999 With Landing-Free Zones

Increasing the numbers of flights along current flight paths would have less impact than increasing helicopter use in areas that currently receive low numbers of helicopter icefield tour landings (Gilkey, Herbert, Lemon, Taku and Hole-in-the-Wall Glaciers, and the Backcountry), or no helicopter icefield tour landings (Eagle and Twin Glaciers, and Death Valley).

Mendenhall and Norris Glaciers currently experience the greatest number of helicopter icefield tour landings. Under this alternative, use on the Mendenhall Glacier increases 27 percent over the next five year. Norris Glacier use increases 73 percent. Forest Service biologists have observed mountain goats in high helicopter use zones (Mt. Bullard, Mt. McGinnis near the landing site on Mendenhall Glacier). Mountain goats in these areas appear to have adapted to the regular, somewhat predictable helicopter activity typical of icefield tours as long as the activity is consistent with mitigation recommended in Chapter 2, Mitigation (minimum 1500 feet vertical and horizontal clearance, see Migation Chapter 2). The information that is lacking in this example, however, is distribution and abundance data prior to the beginning of icefield tours. We cannot, because of the lack of this information. provide a before and after assessment of how mountain goats redistributed or changed in abundance when icefield tours begin in the Mendenhall and Norris Glacier areas. A thorough literature review (Environmental Consequences, Section D. Issue 3 - Wildlife, pp. 4-18 through 4-19), indicates that mountain goats and other ungulates move away from helicopter and other disturbances associated with machines and humans.

Maps 11a-11w show how recommended flight paths interact with predicted mountain goat habitat use areas. In most cases, the flight paths are a sufficient distance from predicted habitat use areas to minimize disturbance. When flight paths overlap with predicted habitat use areas, mitigation measures described in Chapter 2, Mitigation, will minimize disturbance impacts.

Under this alternative, icefield landings on Gilkey Glacier and in the Backcountry would increase 217 percent, 118 percent on Herbert Glacier, 154 percent on Taku and Hole-in-the-Wall Glacier, and 16 percent on Lemon Glacier. No new helicopter icefield tour landings would occur on three glaciers in zones currently classified as no-use zones (Eagle and Twin Glaciers and Death Valley). Therefore, wildlife in these no-use zones would not experience increases in helicopter activity associated with icefield tour landings.

## E. EFFECTS ON THE JUNEAU ICEFIELD

Forest Service staff have observed the landing sites each year for the past five years and have not noticed any major change in the conditions at the landing sites caused by helicopter landings. The only change noticed was at the Mendenhall Glacier, Suicide Falls site where the shelter which Temsco keeps there slowed down the summer melt of the ice under it. This resulted in a raised ice rectangle after several weeks. This change was eliminated when Temsco began to move the shelter frequently. Continued use would have little or no effect on the ice at the helicopter landing locations for any of the alternatives. The effects would vary by alternative but would be negligible.

#### F. CUMULATIVE EFFECTS

#### **Past Cumulative Effects**

The projections for tourism in Juneau show that visitor arrivals grew approximately 3.4 percent annually between 1985 and 1990. Also cruise passengers increased from 237,070 in 1990 to 372,923 in 1994 (Juneau Convention and Visitors Bureau, 1994). It is likely that this growth will continue. It is likely that cruise ship visitor arrivals could reach 1.3 million in 2000

(Juneau Empire, 2/16/95). This increase would cause an equal increase in the demand for helicopter landing tours. It is likely that helicopter and fixed wing flightseeing tours which do not land would increase by 250 percent causing increased noise over residential areas and recreation trails and places along the Juneau road system. This increase would be noticed on the Montana Creek approach to the Juneau Airport which is the main route for aircraft traveling to and from Skagway and Haines.

#### **Present Cumulative Effects**

The Juneau Icefield Research Program (JIRP) conducts research on the Juneau Icefield. They have ten camps and three caches and have approximately 75 helicopter landings per year, primarily during the summer months. These landings are usually conducted using Era helicopters and travel similar routes used by all three companies to access the Juneau Icefield. The cumulative effect of these landings is that of the noise impact to recreation visitors, Juneau residents, and wildlife in addition to the effect of the use described in this EIS.

The Taku River receives a large amount of airplane traffic, including travel to and from Juneau/Atlin; transportation of cruise ship passengers to Taku Lodge; and flightseeing over the Juneau Icefield, primarily in the area of Taku and Norris Glacier. This air traffic, within the Taku River corridor, contributes noise additional to the helicopter travel discussed in this EIS. This noise will impact the solitude of recreation visitors to this area and this will be a cumulative effect when added to the noise created by the helicopter glacier landing tours traveling to Taku, Hole in the Wall, and Norris Glaciers.

Wilderness landings in the Tracy Arm Ford's Terror, Chuck River, Admiralty Island, and Endicott River are currently being analyzed in a NEPA document being prepared by the Forest Service. This document will determine the amount, if any, of helicopter landings which could occur in these wilderness areas and will identify any landing sites if helicopter landings are authorized. If helicopter landings are authorized in these areas, travel routes to these wilderness areas would be different than the travel routes described in this EIS.

#### **Future Cumulative Effects**

The following proposals have been submitted to the Forest Service. Current Juneau Icefield helicopter activity will be evaluated in cumulative effects analysis for those proposals.

- 13,260 landings for helicopter glacier tours in the Skagway/Haines area and 1,100 landings for heli-hiking in the Skagway area. All of these tours would, if authorized, originate in either Skagway or Haines and would have no cumulative effect on helicopter landing tours traveling to the Juneau Icefield from the Juneau area.
- The Forest Service has received a request for heli-hiking tours in the alpine area of the Juneau forelands between Mendenhall Valley and Berners Bay (1,600 landings per year). A separate NEPA document will analyze the effects of authorizing this request. At that time the environmental effects from helicopter glacier landing tours will be considered. If heli-hiking tours are authorized, it is likely that more helicopters will be traveling in the vicinity of Mendenhall Valley residential areas and recreation trails and places along the Juneau road system and that the cumulative effects of this additional helicopter use would increase the number of residents and recreation visitors highly annoyed by helicopter noise. If wildlife mitigation similar to those in this EIS are included in any authorization, it is unlikely there would

be any cumulative impact to wildlife although it is possible some wildlife would be displaced due to new areas receiving helicopter traffic.

- 420 landings for heli-skiing in the Juneau area and Out of Bounds, 180 landings for heli-skiing. These landings would be primarily on mountain tops in Zone 1-Gilkey Glacier and Back country (November through May). These tours, if authorized, would occur during a time period when helicopter glacier landing tours would not occur. There would not be cumulative impacts because of this seasonal difference in operating periods.
- Army National Guard has requested approval to conduct exercises using helicopters one to two times per week in the Chilkat Mountains. This helicopter use is not in the vicinity of the Juneau Icefield and travel routes to the Chilkat Mountains from Juneau will not be in the area of the travel routes identified in this EIS, therefore, there would not be any cumulative impacts from this use.
- Ward Air/Coastal Helicopters: 900 landings in 1996 and 1,800 landings in 2001. These landings would occur on Gilkey Glacier, and areas north of the Juneau Icefield Study Area and south of Berners river. Travel routes for this proposal are not in the areas of the travel routes and helicopter landing sites discussed in this EIS with the exception of the Gilkey Glacier. For this glacier, cumulative impacts would occur if this use is authorized.

Separate NEPA documents will be completed for these proposals to analyze the effects of authorizing these requests. In 1996, it is likely that the Forest Service will analyze the cumulative effects of heli-hiking proposals and the helicopter glacier tours.

For the proposed Kensington Gold Project, the Kensington Venture plans to ferry crews to the project site from the Juneau airport via helicopters (USDA Forest Service, 1992b). A camp would be maintained at the project site with shift changes staggered. One helicopter (S-58T) with a 15-20 passenger capacity would be used for crew transport. Flight frequency would average two to four flights per day, five days per week during operations. Flights would not be scheduled for weekends. Helicopters would leave the airport and proceed up Montana Creek, then towards the mouth of Cowee Creek, across Berners Bay and then proceed along the coastline of Lynn Canal to the Project site. Variations from this flight path could occur during extreme weather conditions. The helicopters would quickly climb to a minimum altitude of 300 feet. They would maintain this altitude over all residential areas. Weather permitting, the helicopters would fly at an elevation of 2,000 feet, well above the 300 foot minimum. Flights traveling to the Juneau Icefield and these flight paths up Lynn Canal would not overlap.

The Kensington Gold Project Final Environmental Impact Statement analyzed these additional flights to and from the Juneau airport and determined that noise caused by these additional aircraft flights would not have a significant effect on wildlife, recreationists or residents because any incremental increase would be small compared to the existing traffic volumes.

## G. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

An irreversible commitment of resources is defined as the loss of future options. It applies primarily to non-renewable resources, such as minerals or cultural resources, and to those factors which are renewable only over long time spans, such as soil productivity.

Irretrievable commitments represent the loss of production, harvest or use of renewable resources. These opportunities are foregone for the period of the proposed action, during which other resource utilization cannot be realized. These decisions are reversible, but the

utilization opportunities foregone are irretrievable.

With authorization of special use permits for helicopter glacier tours, there would be not be a foreseeable or predicted irreversible or irretrievable commitment of resources.

[End of chapter]







#### **CHAPTER 5 – LIST OF PREPARERS**

The following are individuals on the Forest Service interdisciplinary team who were responsible for the preparation of this environmental impact statement.

John Favro Team Leader. B.S. in Philosophy and Psychology from California State

University, Fresno; undergraduate course work in Natural Resource

Management to meet USDA Forest Service Professional Forester Requirements

from California Polytechnical University in San Luis Obispo, California.

Twenty-two years experience with the Forest Service in recreation management,

timber management, and fire management.

Roger Birk B.S. in Natural Resource Management from Lincoln University, Missouri.

Seventeen years experience with the Forest Service and Bureau of Land

Management.

Judi Falk B.S. in Biology from Central Michigan University. M.S. in Wildlife

Management from Virginia Polytechnical Institute and State University. Twelve

years experience with the Forest Service and National Park Service.

The following individuals were used as consultants in the preparation of the sound study (USDA, Forest Service, 1994a).

Robin Harrison P.E. has a B.S. in Mechanical Engineering and is certified in Flight Test

Engineering. He is a registered Professional Engineer in California and has published over 30 government publications on the effects of noise and on noise testing. From 1983 to 1994 Mr. Harrison was the Program Leader-Aviation for

SDTDC.

Eric Schilling B.S. in Engineering Technology from Cal Poly, Pomona and has conducted

many field sound studies for SDTDC during the past three years. Mr. Schilling has, for the past three years, purchased, maintained, and calibrated precision acoustic instrumentation including sound level meters, microphones, tape recorders, preamplifiers, and associated accessories. He has had special

acoustics training from Bruel & Kjaer.

[End of chapter]







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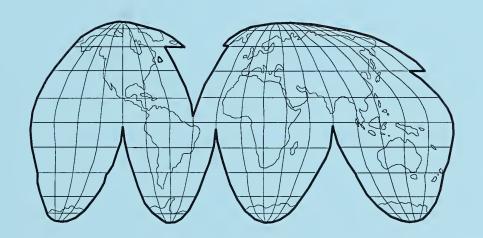
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[End List of References]

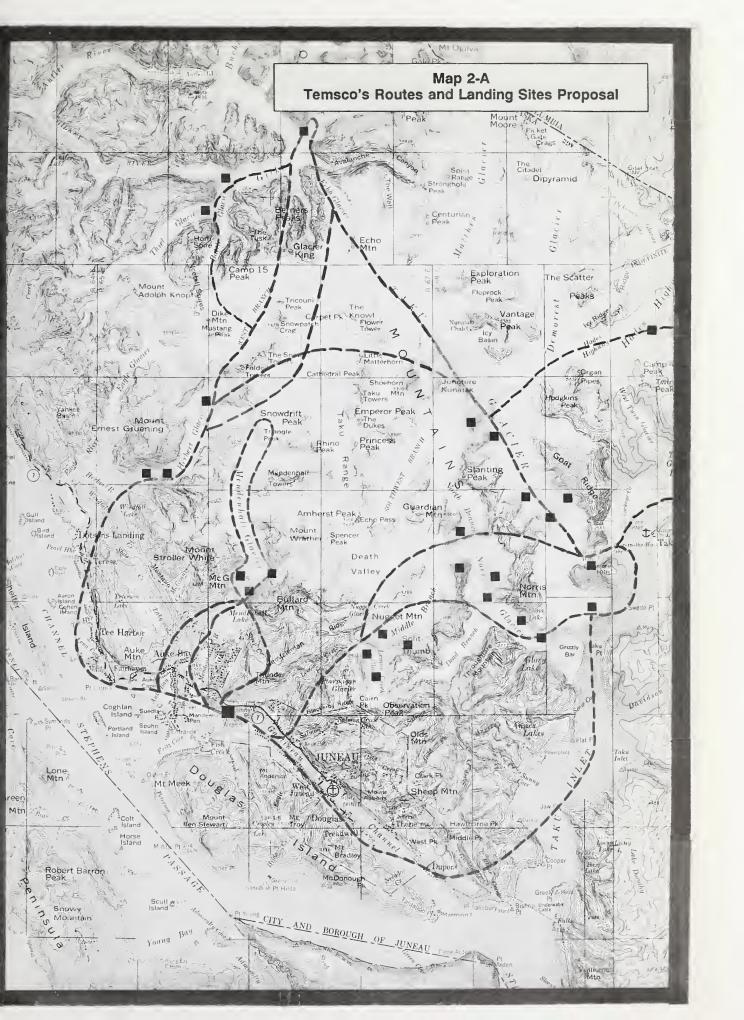
# MAPS



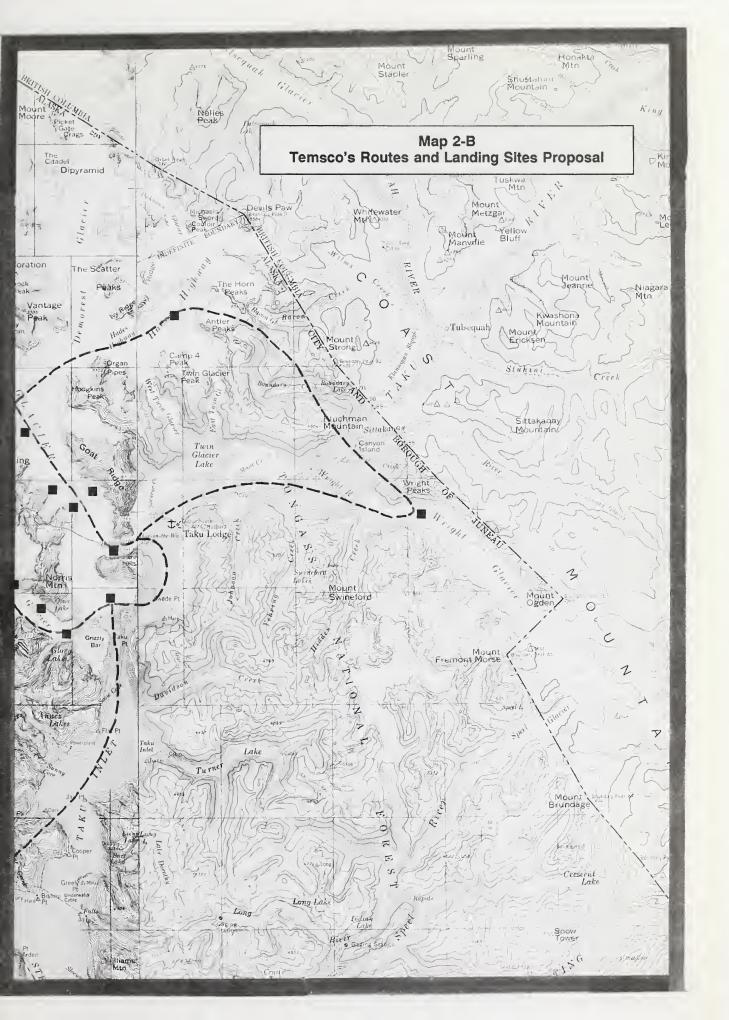




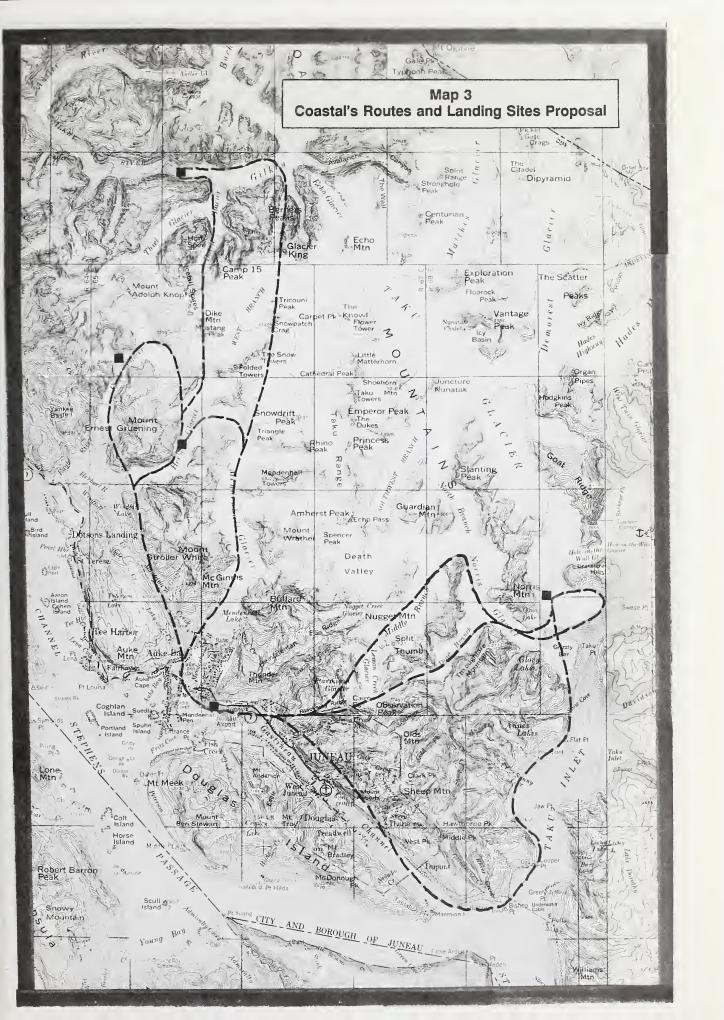




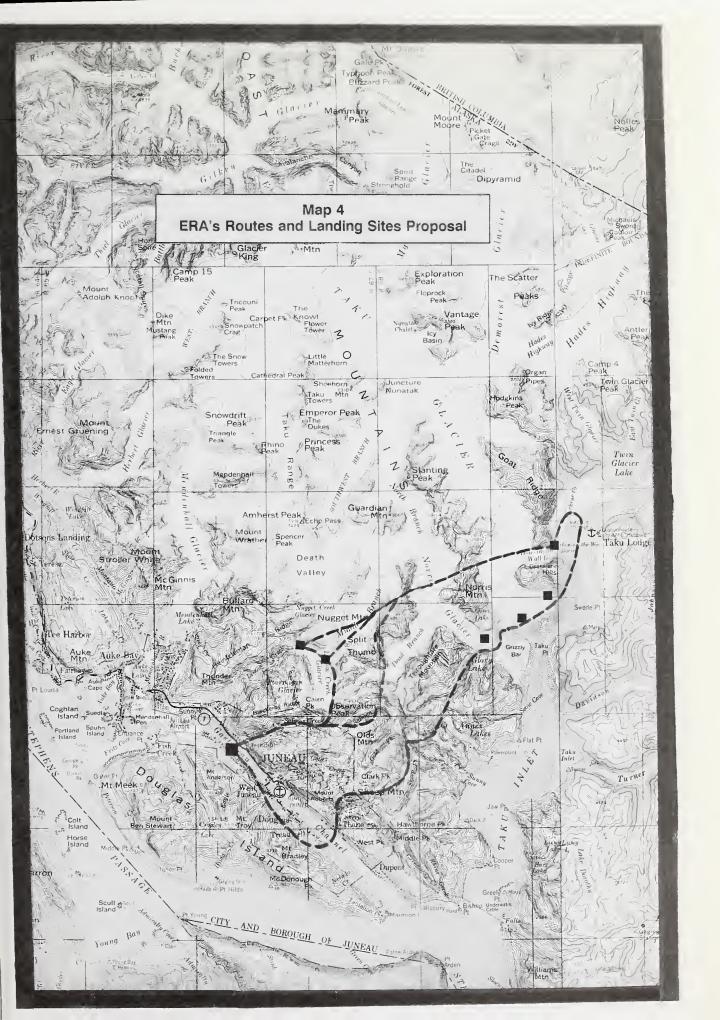




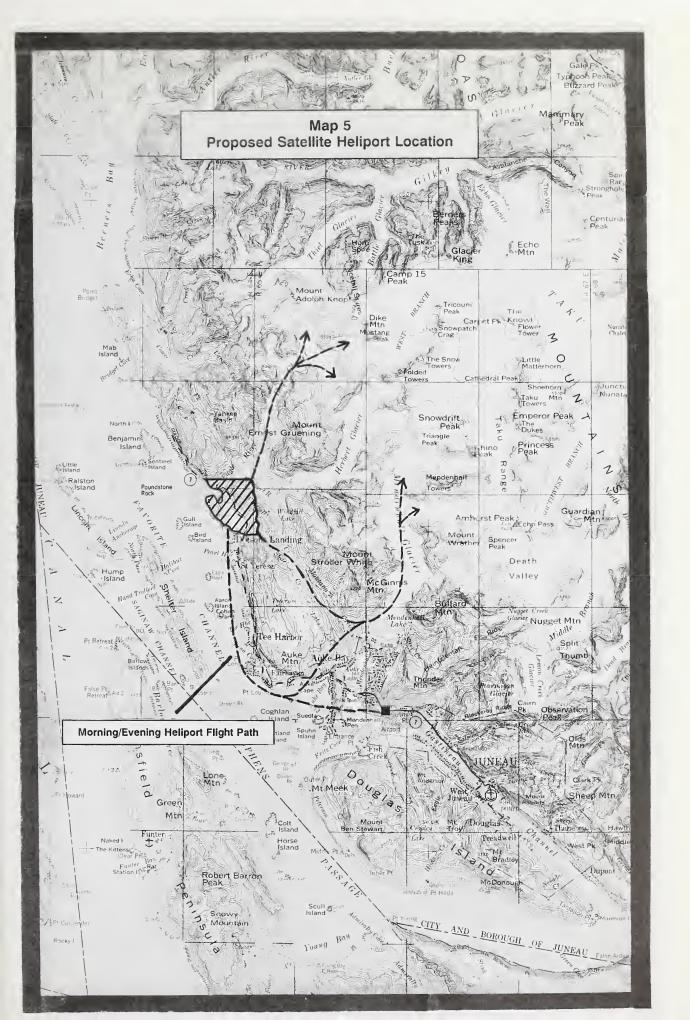




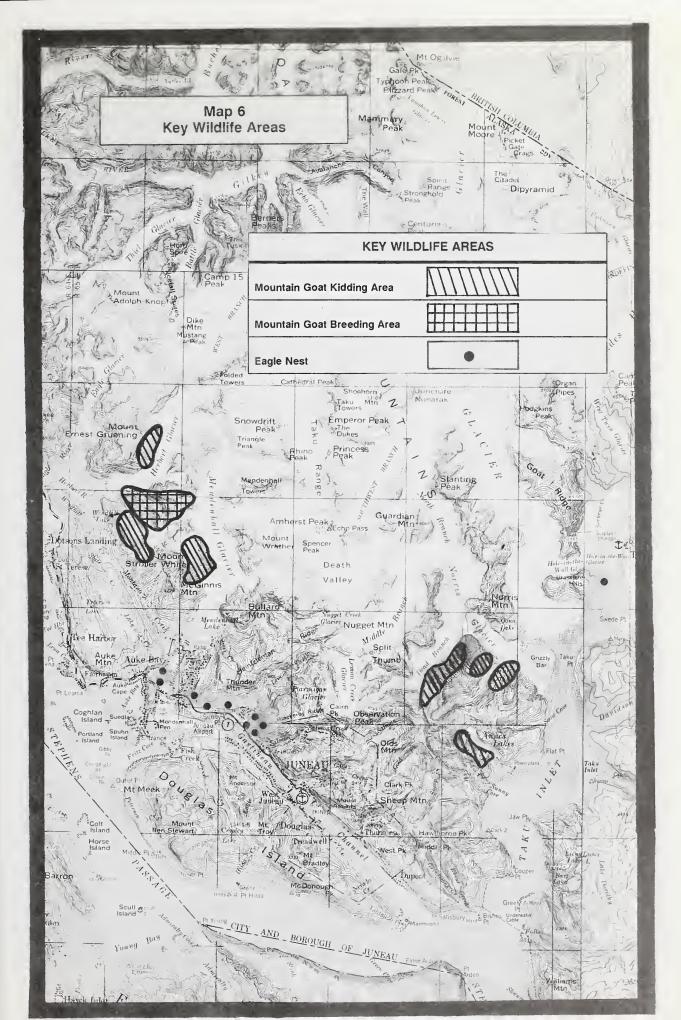




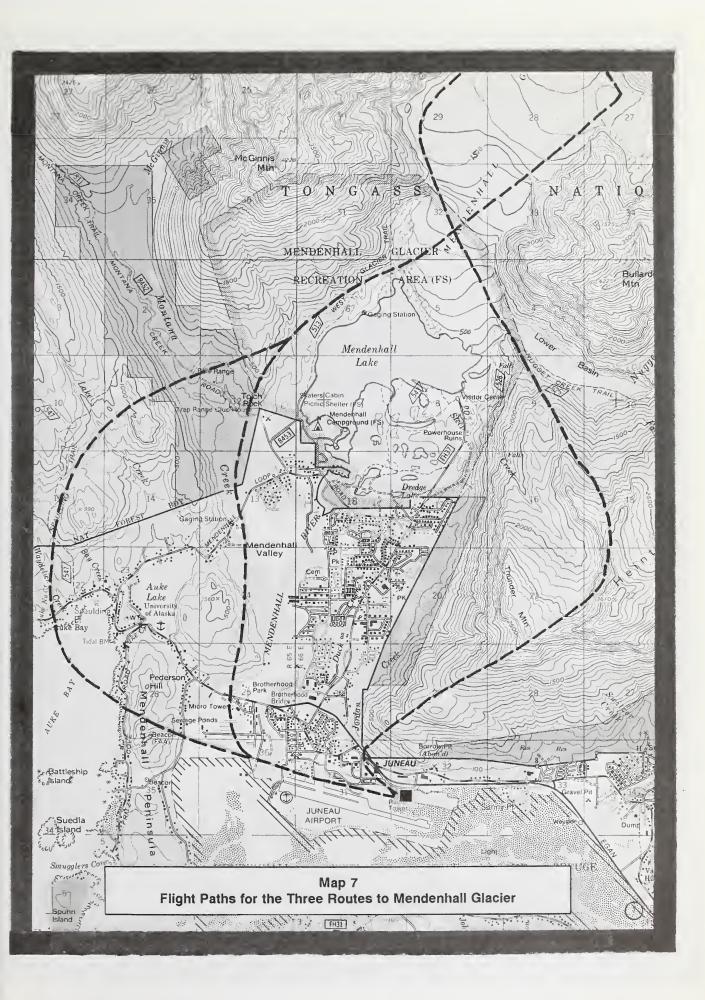




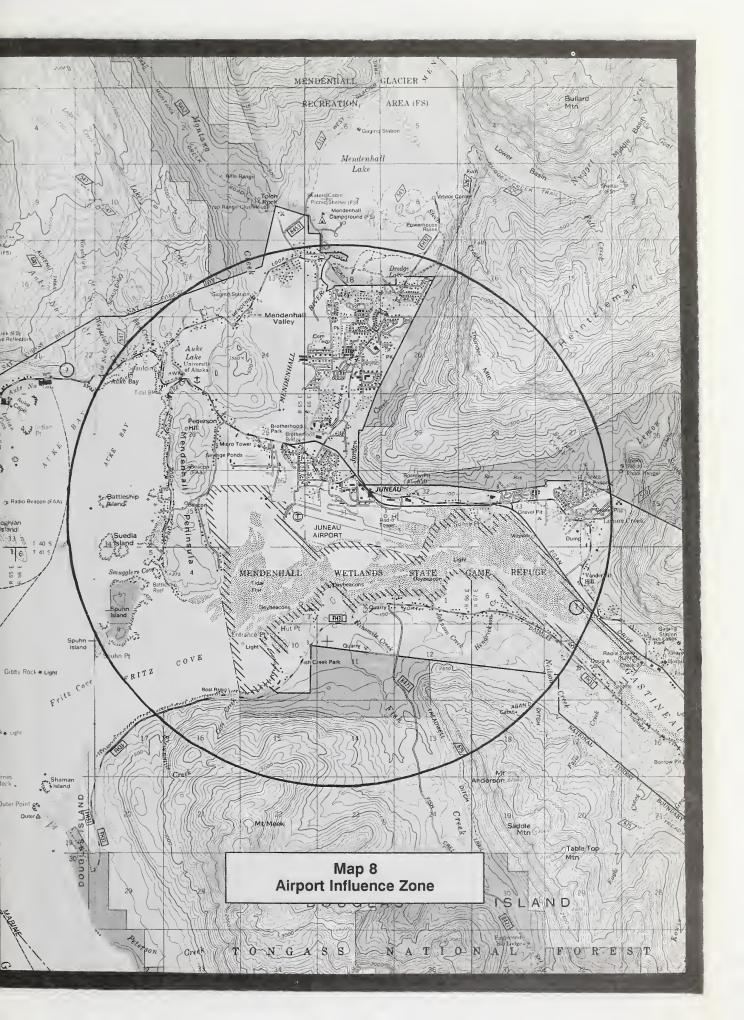




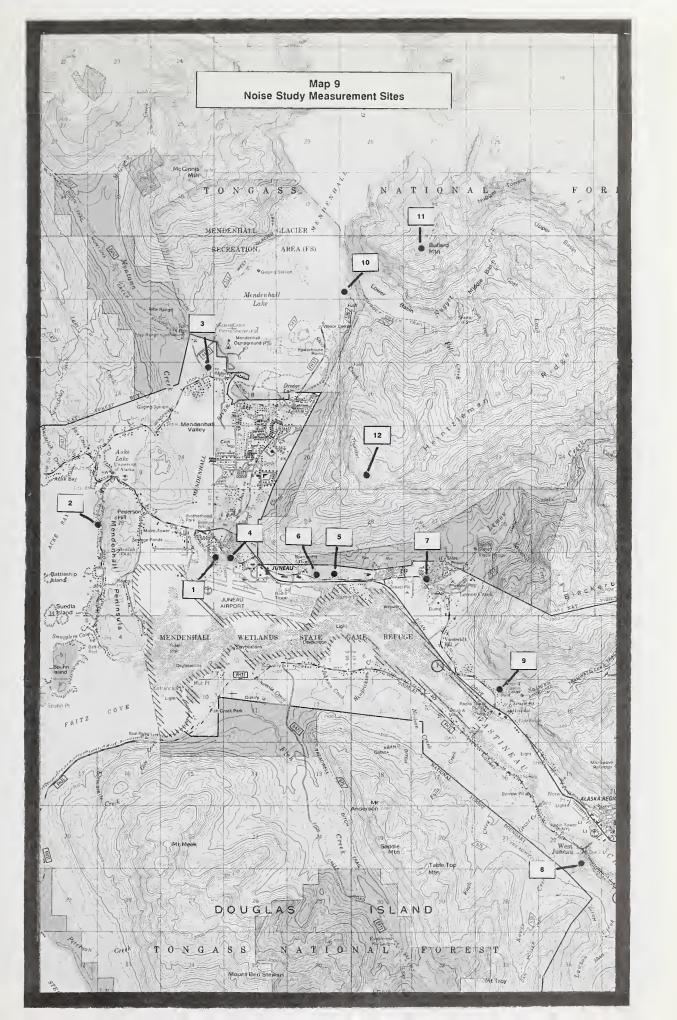




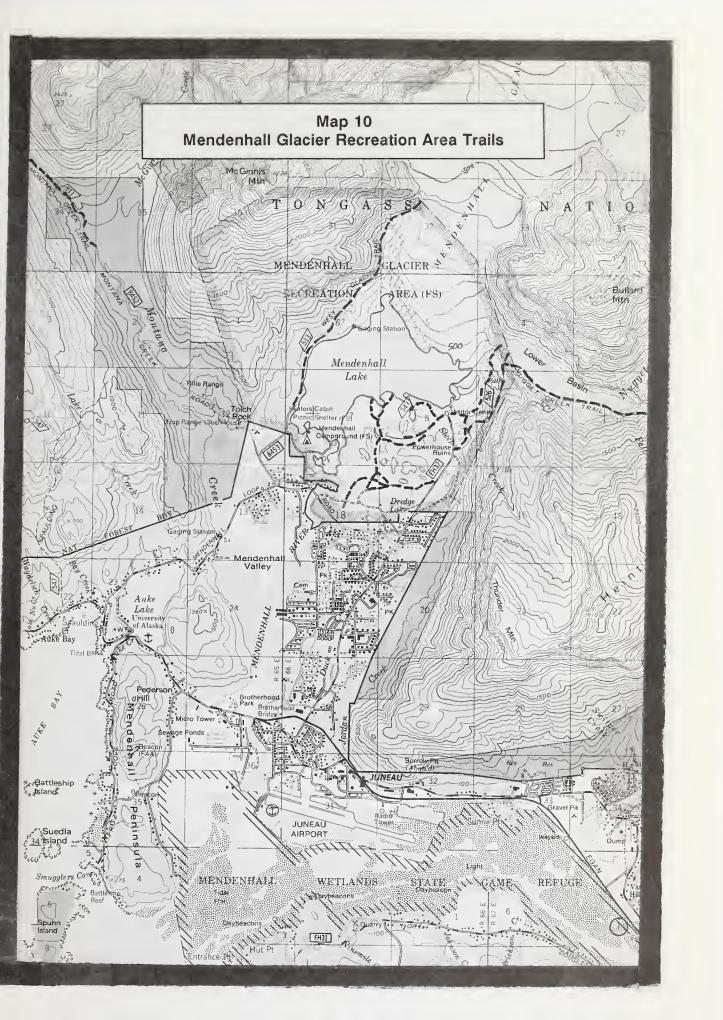












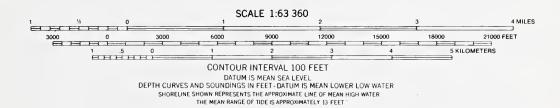


#### Mountain Goat Habitat Capability Areas and Helicopter Flight Paths Maps 11-A through 11-W

Maps 11-A through 11-W display mountain goat habitat capability and the helicopter flight paths used by the three helicopter companies. Circles on these maps indicate predicted mountain goat habitat (areas within 1300 feet of cliffs used as escape terrain). Mountain goat presence has not been field verified in all predicted locations.

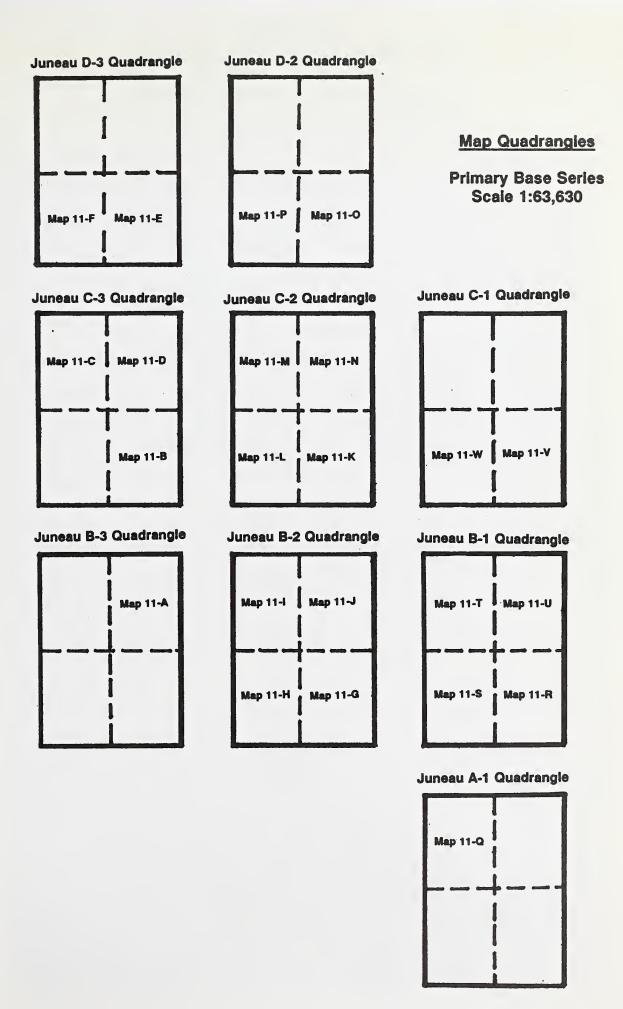
The map key on the next page lists the map quadrangle and section within each quadrangle that contains the mountain goat habitat capability areas and the helicopter flight paths. Maps 11-A through 11-W have not been reduced or enlarged; the map scale legend listed below can be used for determining distances.

The flight paths indicated on these maps show the flight paths used by each helicopter company. The Flight Path legend below lists the helicopter company and associated flight path. For an overview of the information contained on these maps, simply cut them out and put them together according to the map key on the following page.



| Helicopter Flight Paths |  |
|-------------------------|--|
| Temsco                  |  |
| ERA                     | ###################################### |
| Coastal                 |  |

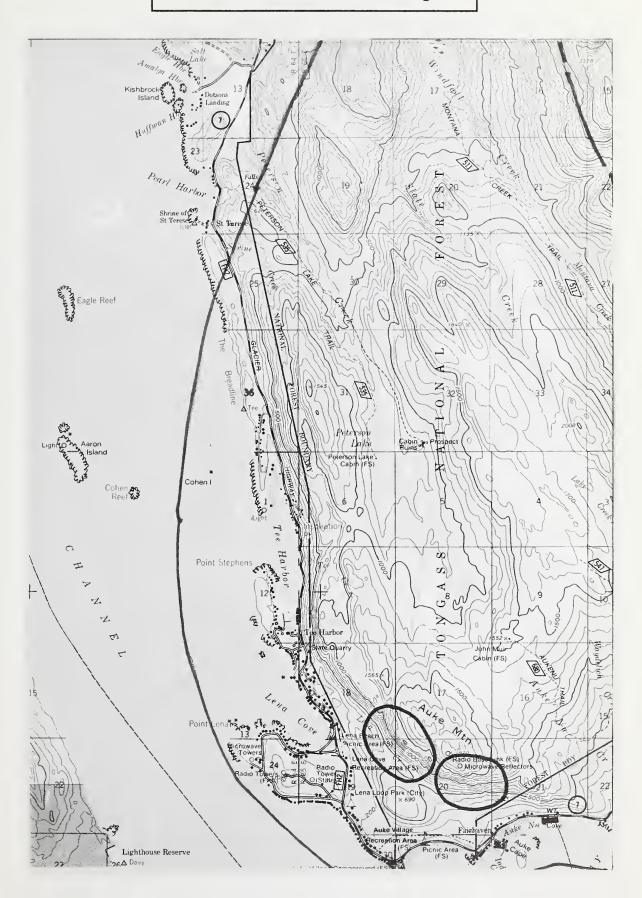






Map 11-A

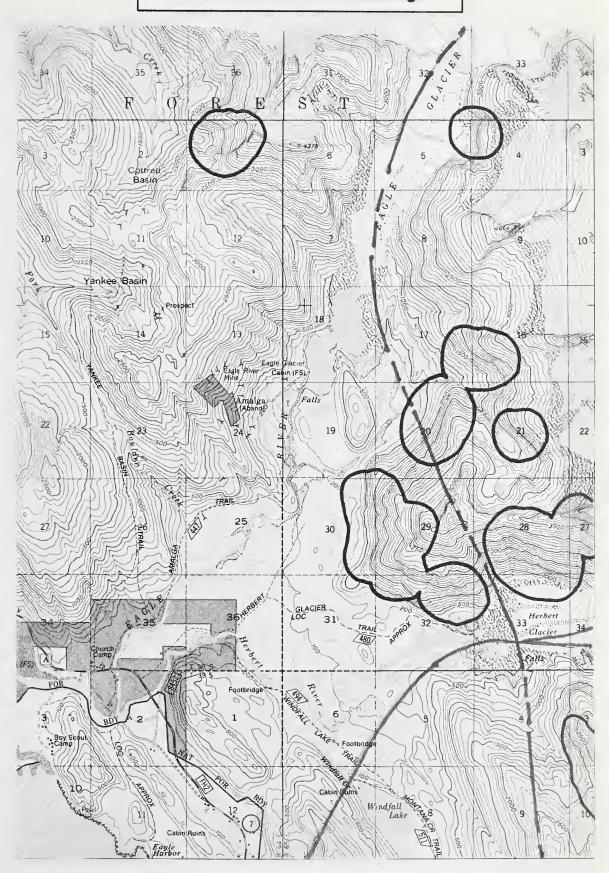
NE 1/4 of Juneau B-3 Quadrangle





Map 11-B

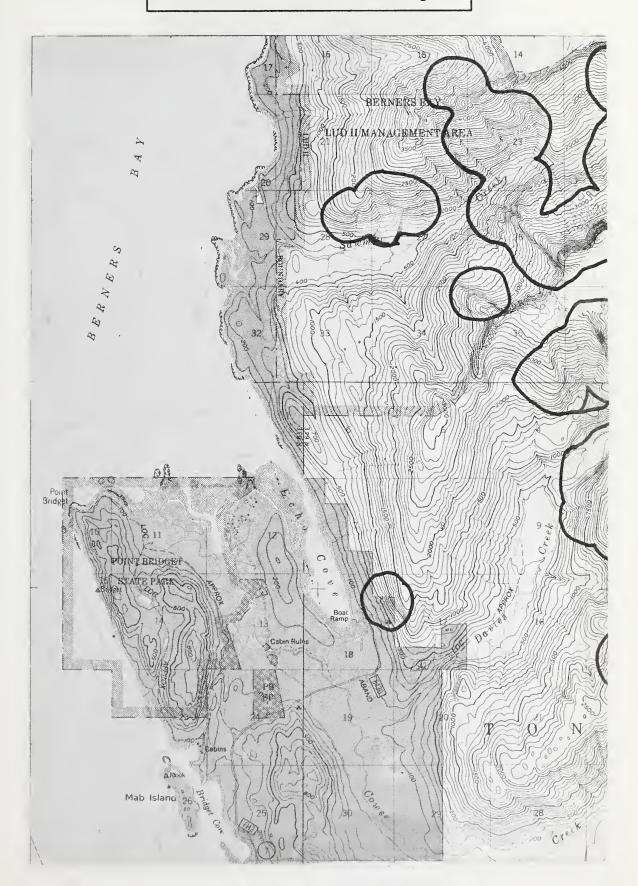
SE 1/4 of Juneau C-3 Quadrangle





Map 11-C

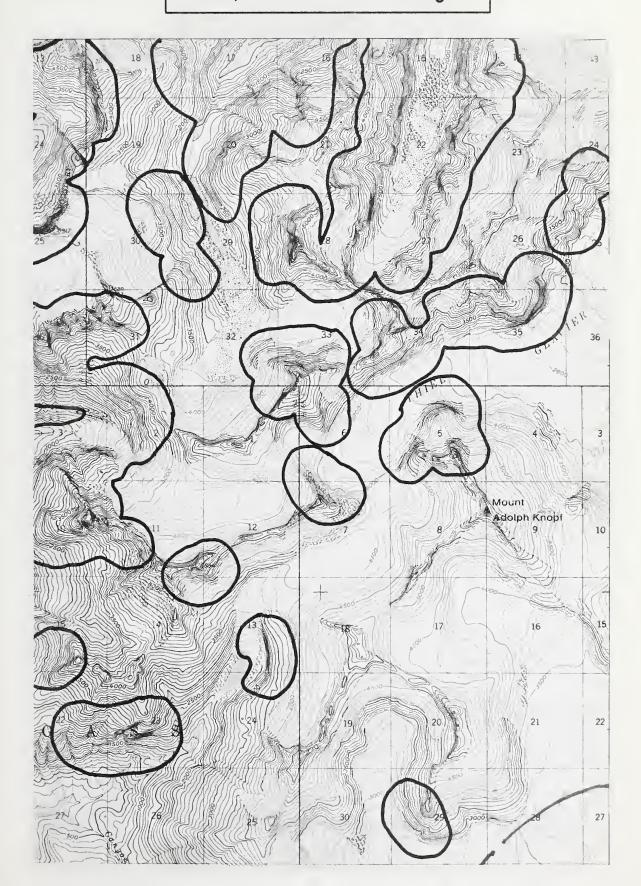
NW 1/4 of Juneau C-3 Quadrangle





Map 11-D

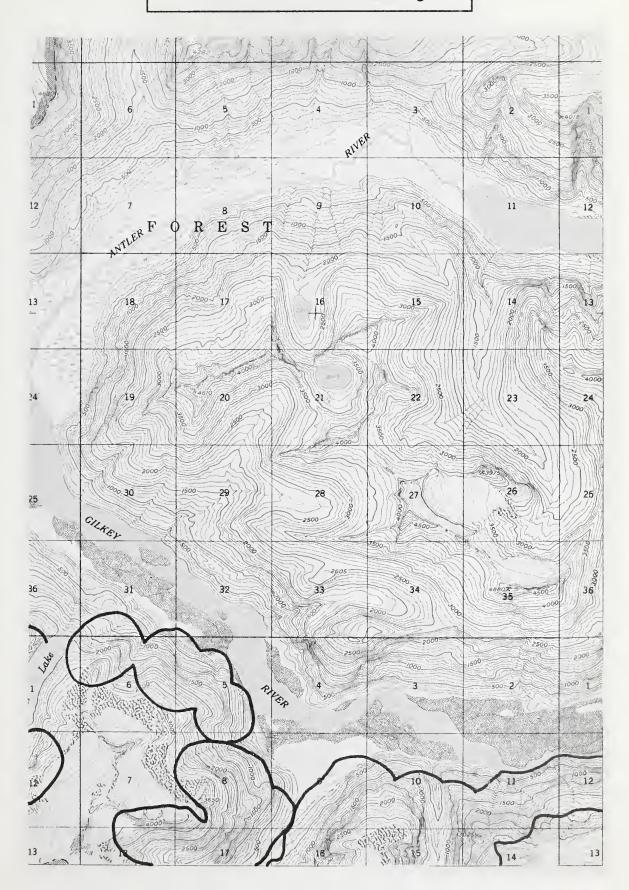
NE 1/4 of Juneau C-3 Quadrangle





Map 11-E

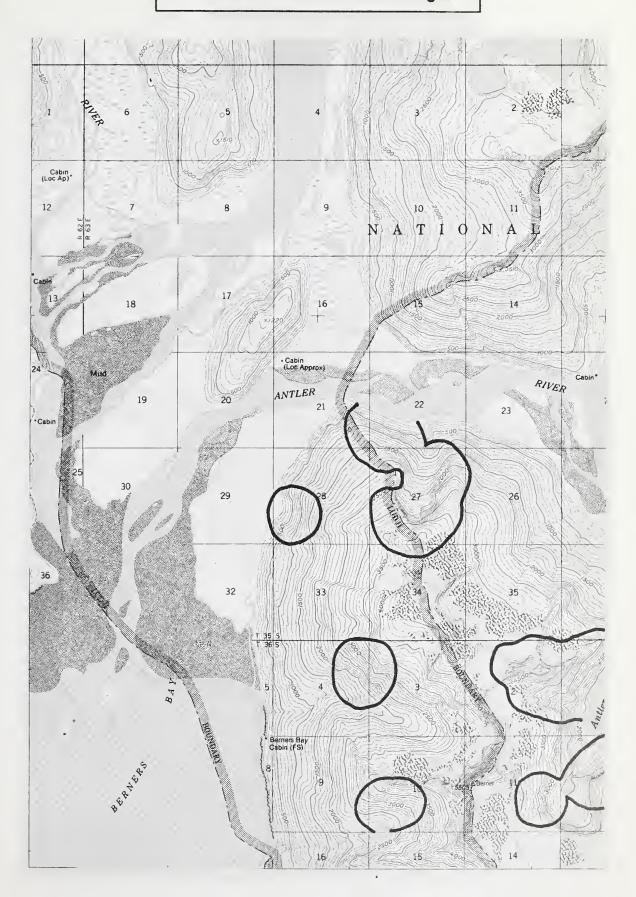
SE 1/4 of Juneau D-3 Quadrangle





Map 11-F

SW 1/4 of Juneau D-3 Quadrangle

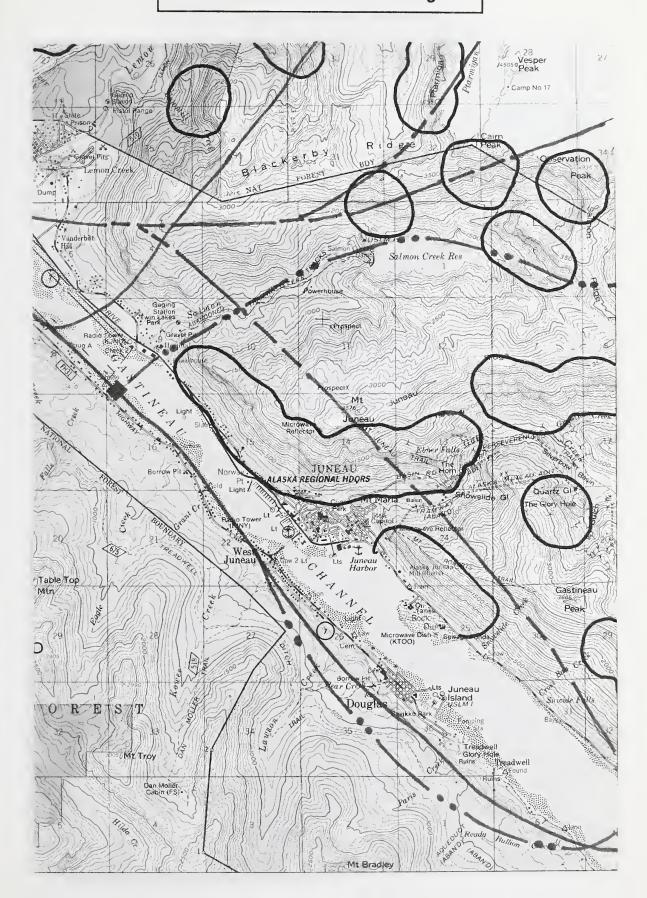




#### Map 11-G

#### Mountain Goat Habitat Capability and Helicopter Flight Paths

SE 1/4 of Juneau B-2 Quadrangle





Map 11-H

#### Mountain Goat Habitat Capability and Helicopter Flight Paths

SW 1/4 of Juneau B-2 Quadrangle

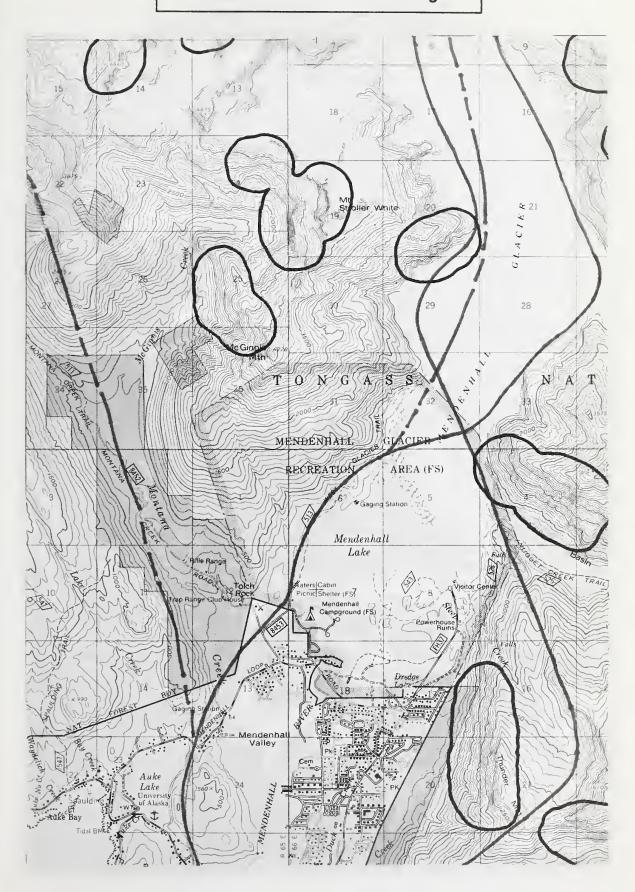




#### Map 11-l

#### Mountain Goat Habitat Capability and Helicopter Flight Paths

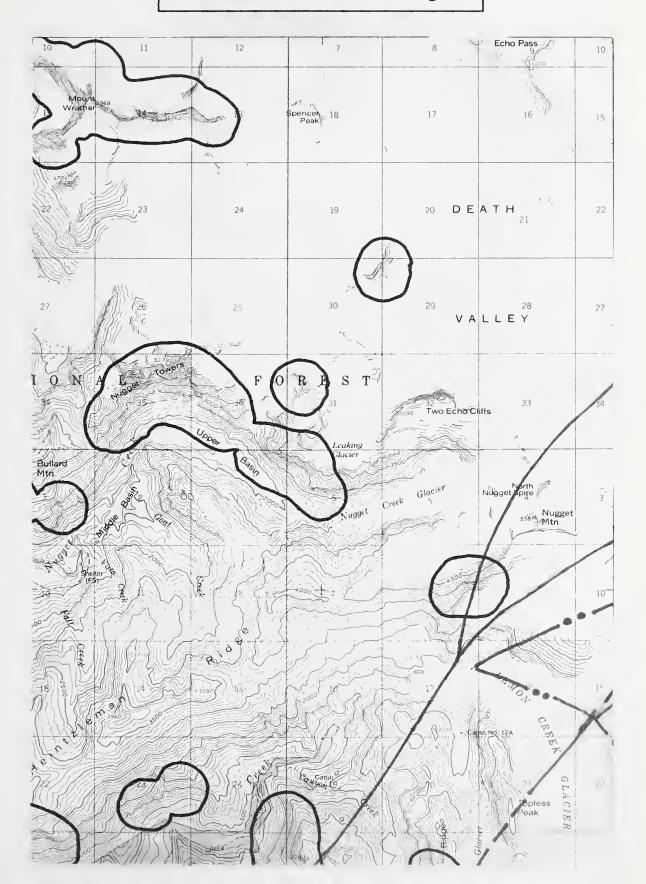
NW 1/4 of Juneau B-2 Quadrangle





Map 11-J

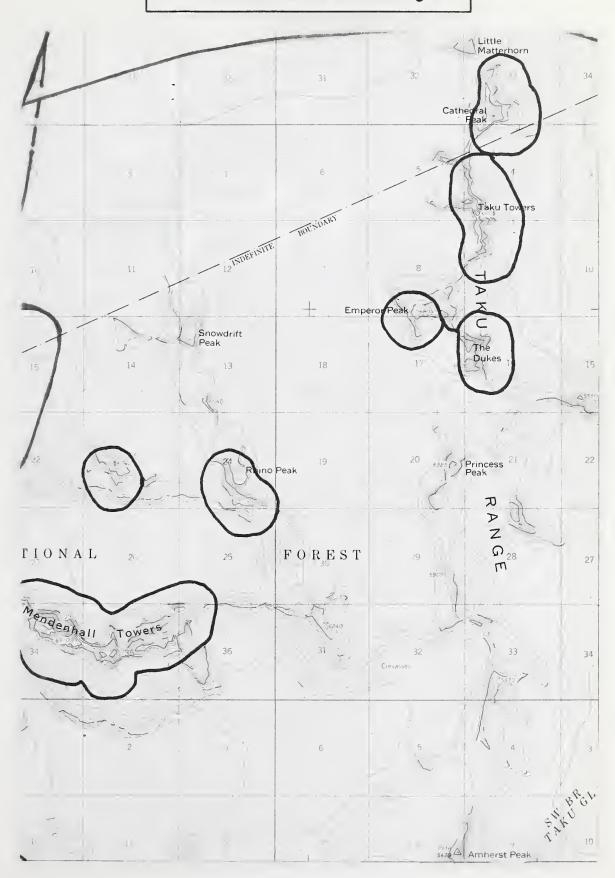
#### NE 1/4 of Juneau B-2 Quadrangle





Map 11-K

SE 1/4 of Juneau C-2 Quadrangle

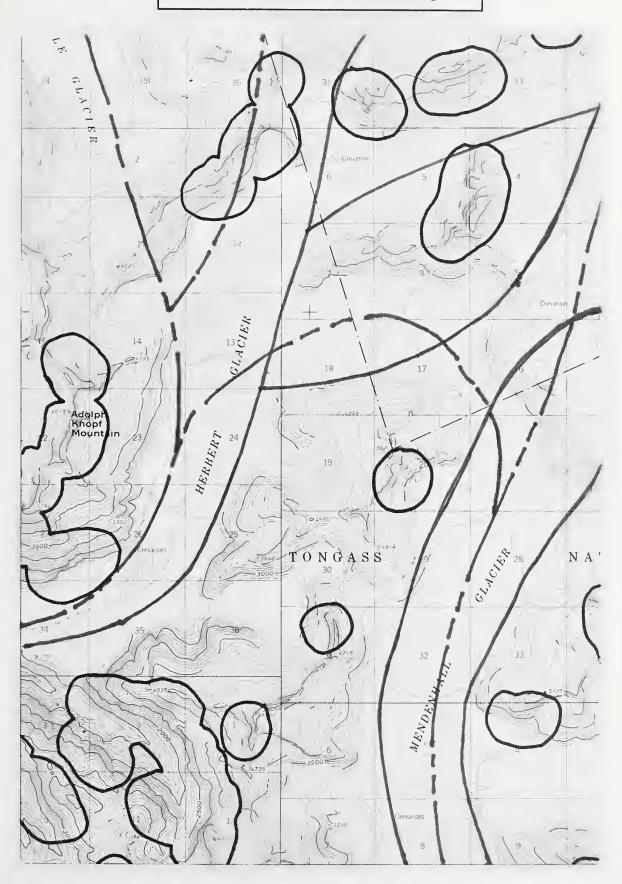




Map 11-L

Mountain Goat Habitat Capability and Helicopter Flight Paths

SW 1/4 of Juneau C-2 Quadrangle

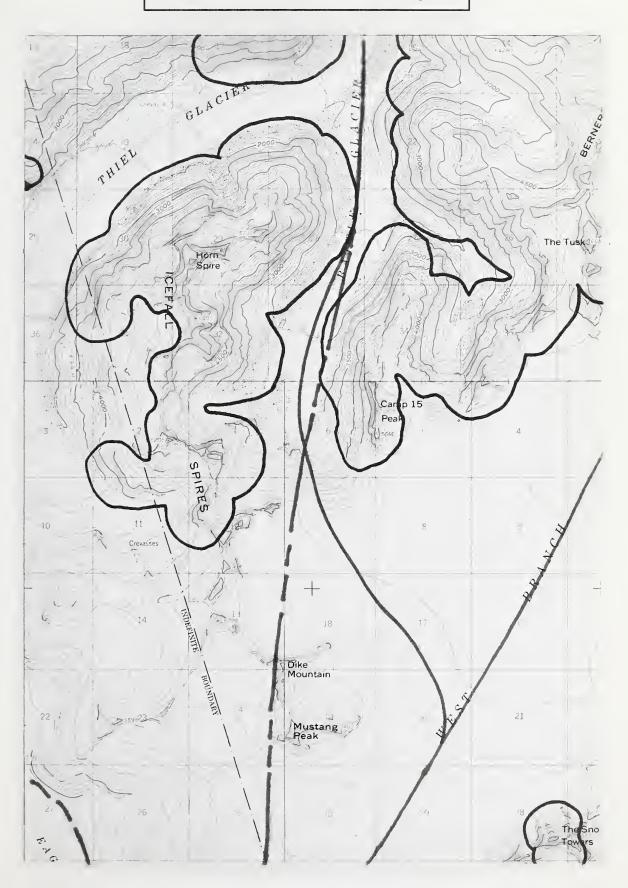




Map 11-M

Mountain Goat Habitat Capability and Helicopter Flight Paths

NW 1/4 of Juneau C-2 Quadrangle

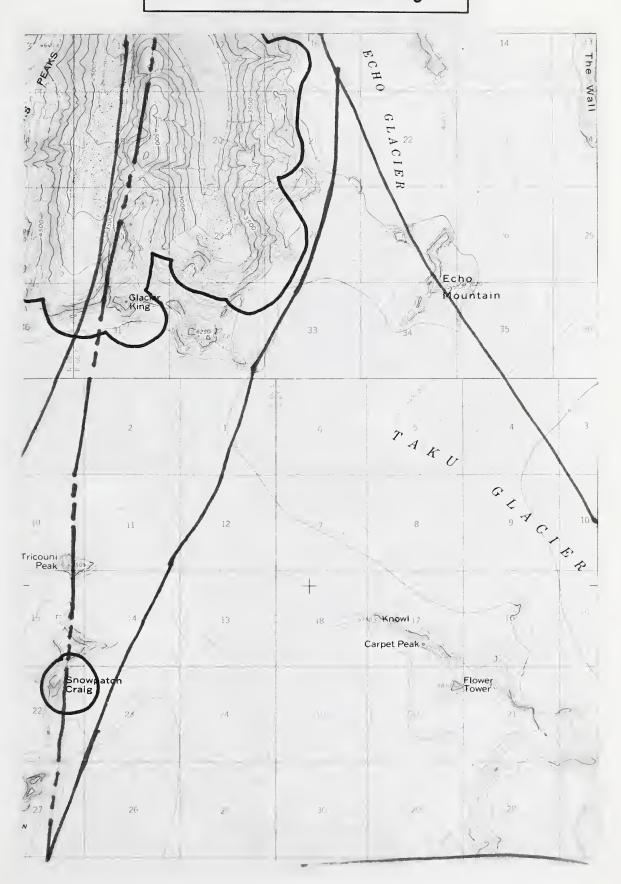


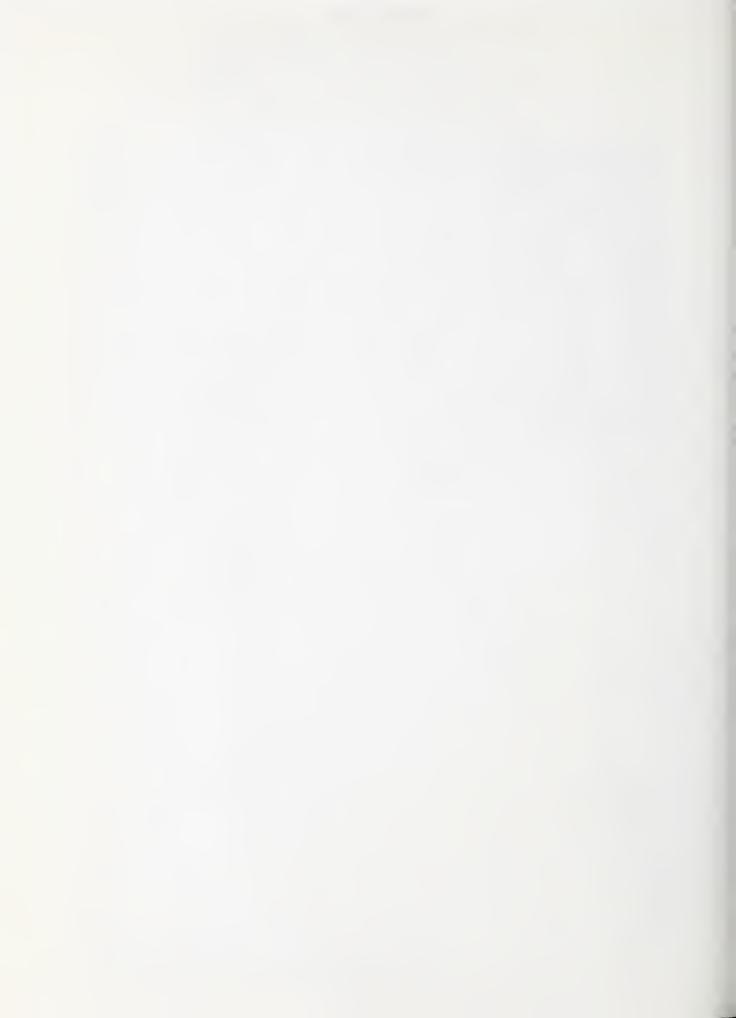


#### Map 11-N

### Mountain Goat Habitat Capability and Helicopter Flight Paths

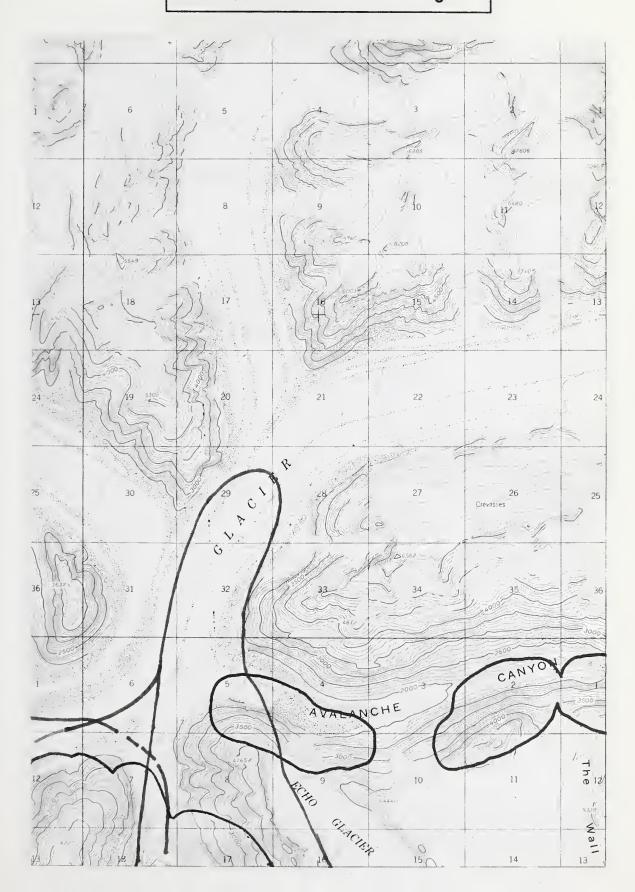
NE 1/4 of Juneau C-2 Quadrangle





Map 11-0

SE 1/4 of Juneau D-2 Quadrangle

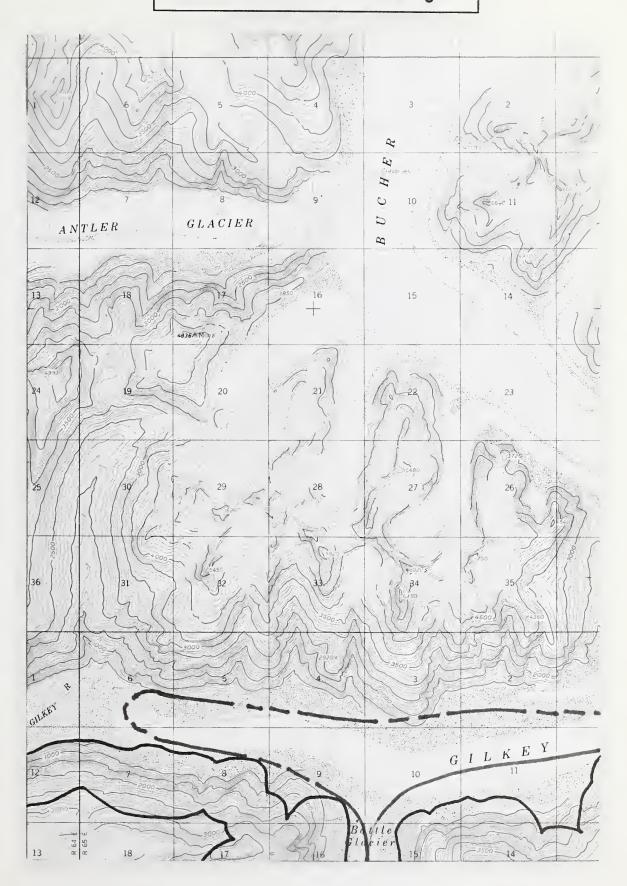




#### Map 11-P

### Mountain Goat Habitat Capability and Helicopter Flight Paths

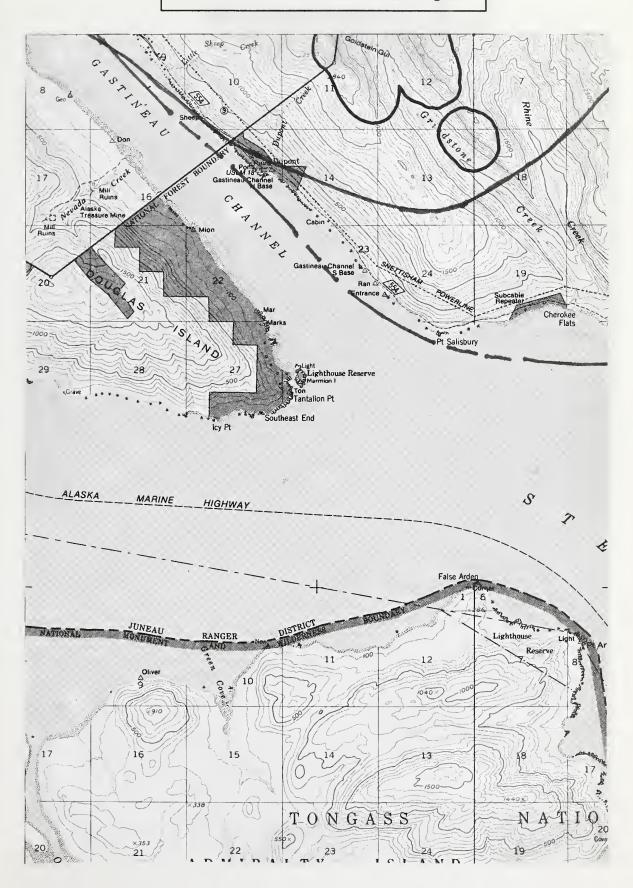
SW 1/4 of Juneau D-2 Quadrangle





Map 11-Q

NW 1/4 of Juneau A-1 Quadrangle

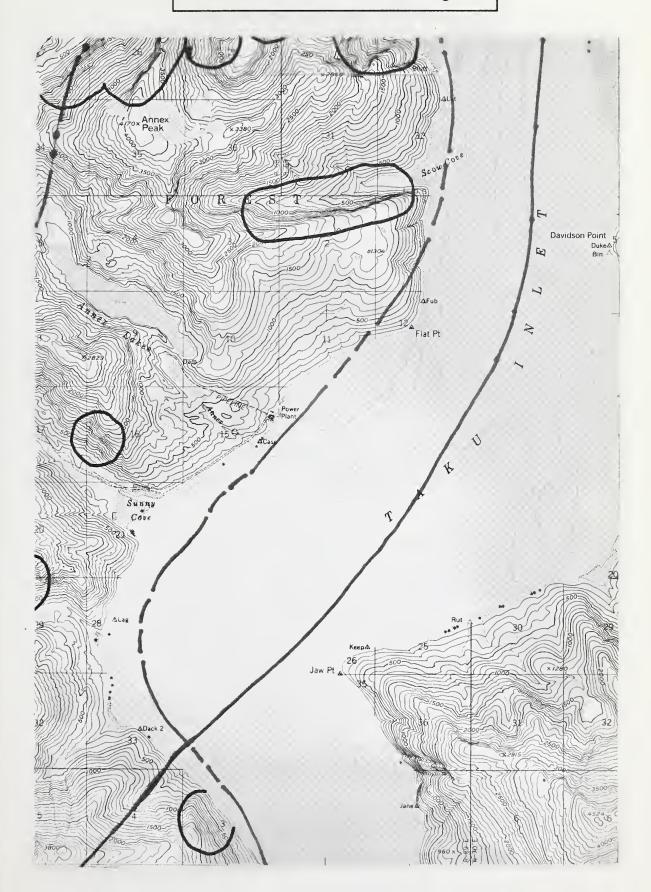




Map 11-R

Mountain Goat Habitat Capability and Helicopter Flight Paths

SE 1/4 of Juneau B-1 Quadrangle

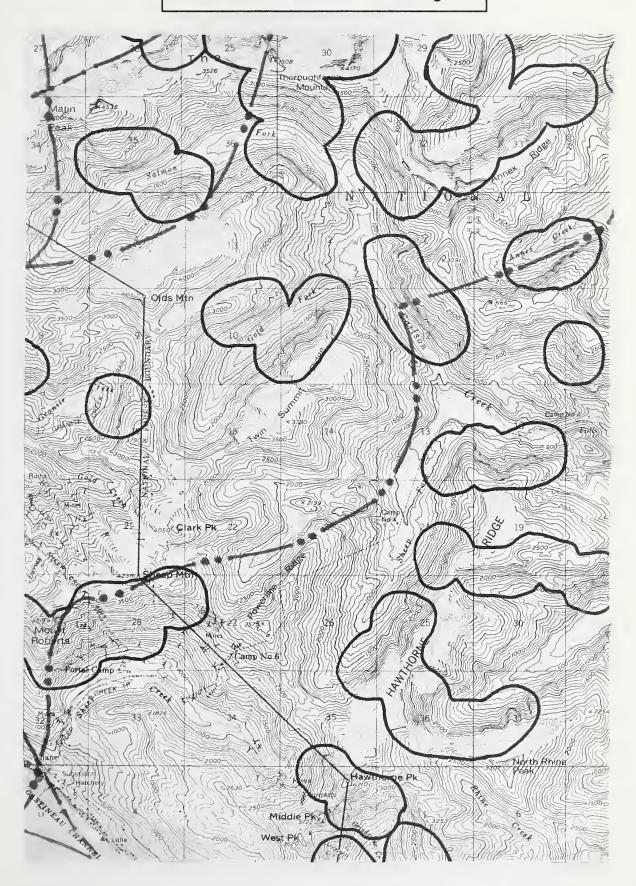




#### Map 11-S

#### Mountain Goat Habitat Capability and Helicopter Flight Paths

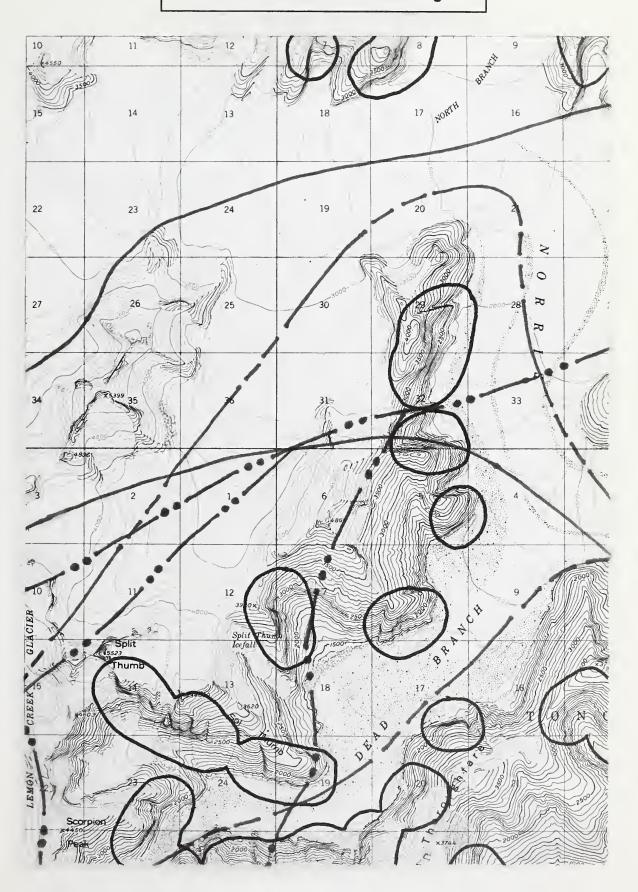
SW 1/4 of Juneau B-1 Quadrangle





Map 11-T

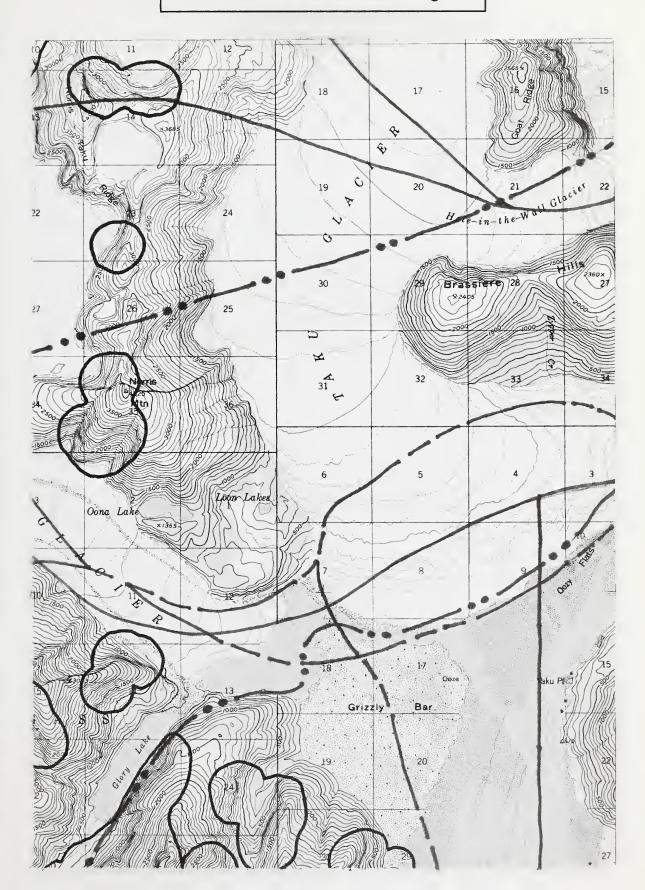
NW 1/4 of Juneau B-1 Quadrangle





Map 11-U

NE 1/4 of Juneau B-1 Quadrangle





Map 11-V

Mountain Goat Habitat Capability and Helicopter Flight Paths

SE 1/4 of Juneau C-1 Quadrangle

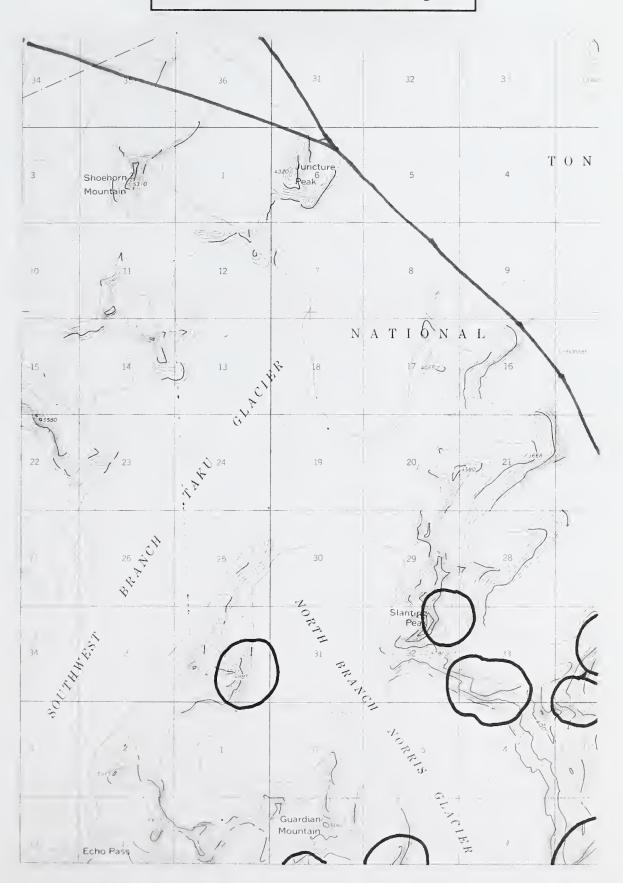




Map 11-W

Mountain Goat Habitat Capability and Helicopter Flight Paths

SW 1/4 of Juneau C-1 Quadrangle





# APPENDICES



# APPENDIX A DEIS COMMENTS AND RESPONSES



December 1, 1994

Juneau Ranger District USDA Forest Service, Alaska Region 84465 Old Dairy Road Juneau, Alaska 99801 Kenneth B. Mitchell District Ranger

Dear Mr. Mitchell:

We have reviewed the Helicopter Glacier Tours Draft Environmental Impact Statement (DEIS) for helicopter tours to the Juneau Icefield and offer the following comment:

The environmental impacts associated with building a satellite heliport referred to in Alternative B are inadequately described in the DEIS. From the description in the BIS we only know that this alternative would be located between miles 25 and 28 on the Glacier Highway. The DRIS is silent regarding most impacts that would result from development of the satellite heliport. To fairly evaluate Alternative F the specific location, and amount and type of habitat that would be impacted by construction of an alternative heliport should be disclosed.

-:

Thank you for the opportunity to review the document. We would appreciate receiving the final environmental impact statement when it is available.

RANGER DISTRICT JUNEAU

10 . 94

Chief, Protected Resources . Zimmerman Ph.D Sincerely, Steven T

Management Division

CEPUTY RANGER C'STRICT PANCEH

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PIN PUNER

Live Branch

satellite heliport. Please refer to the description of Alternative E The Final BIS has been expanded to include more information on the in Chapter 2 and the consequences in Chapter 4, Issue 1.

UNEAU CHAMBER OF COMMERCE

12/14/9

DEC 16'94

Mr. Kenneth E. Mitchell
District Ranger
Juneau Ranger District, Tongass National For
8465 Old Dairy Road
Juneau, AK 99801

Dear Mr. Mitchell:

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|                     | est        |     |              |             |

The Juneau Chamber of Commerce, has seen the visitor industry in Juneau and all of Alaska grow over the past several years. Through the efforts of the state and local governments and private industry, Alaska has become the worlds third most popular destination for cruise travelers.

This has happened at an opportune time, as several other industries within the state have started to decline. the visitor industry is one of the few that shows a growth trend which should continue well into the future. It has become an integral part of our state and local economy. The key to this continued growth is access to the natural splendor everyone comes to see.

We understand that the U.S. Forest Service will soon be making a determination as to what levels helicopter glacier landing tours will be allowed on the Juneau Icefield. Flightseeing is one of the most highly rated visitor activities, especially the helicopter glacier landing tours. The opportunity for our visitors to walk on a glacier is a rare and stimulating adventure.

In addition, we believe that using a helicopter to experience the glaciers and other portions of the Tongass National Forest greatly minimizes the environmental impact of these visitors on the forest. No trails or roads are needed; in fact, no facilities are required.

2.1

We support the increase of helicopter tours as outlined in Alternative B. Icefield tours are becoming one of the most popular activities in Juneau for our visitors. Lets make access to the Tongass National Forest available to the people.

78/4

huck Achberger, Director

124 West 5th Street • Juneau, Alaska • 99801

Phone: (907) 586-6420 • Fax: (907) 463-5670

2.1

Thank you for your comment.

# WORLD EXPLORER CRUISES

15 December 1994

District Ranger Juneau Ranger District 8465 Old Dairy Rd. Kenneth Mitchell Juneau AK 99801

Dear Mr. Mitchell

considering important changes to present permit restrictions on helicopter flights into Forest Service lands - the vast majority of land in Alaska. Further, that USFS must approve the use of helicopters to ferry hikers and tourists to landings in areas under It has come to our attention that the U.S. Porest Service is the authority of USPS.

World Explorer Cruises has been bringing visitors to Alaska for 16 years. We have always recommended to our guests that an important way to truly realize the magnificence of the Alaskan landscape to fly over it as most Alaskan routinely do. The most popular, safe, affordable and accessible way to do this has been the helicopter aircraft present for commercial reasons in almost every Alaska port. Our guests plan, budget for, eagerly await their opportunity to make these flights. One of the most popular and affordable flights is from Skagway to the surrounding glaciers. The landing allows the visitor to see terrain and vegetation not available in and around the port nor accessible to most of our guests on foot because of their age and relative infirmity. To prevent this option or to mandate "black out" days would deprive arbitrarily large numbers of visitors this exciting experience with no appreciable gains for environmental concerns. The helicopter touring method is already one of the least invasive means of getting back in the "bush". It requires no intrusive trail blazing, camp sites, litter problems, and controls through the ever present pilot guide the behavior and movement of the visitor.

We hope you will take no actions that will reduce the already modest requirements of the helicopter operators and that you will favorably consider increasing the number of permits to land guests to Alasta Service I it is what resident and visitor should expect from Forest Service management of their national forests

Director of Operations Sinderely Ron Valentine

3.1

Thank you for your comment.

Sen Francisco, California 94111-2544 555 Montpomery Street

(415) 393-1565 8

3.1

JUNEAU PANGER DISTRICT

DEC 16 '94

CEPUTY PANGER

PEC / LANDS

F S S S

Ken Mitchell, District Ranger Juneau Ranger District 8495 Old Dairy Rd Juneau, AK 99801

Re: Temsco Helicopter Permits

Dear Mr Mitchell

I was inspired to come to Juneau 8 years ago after meeting a man in a restauragi, in orthern Alaska who had had a life changing experience on a Temsco helicopter tour to the Mendenhall Glacier. He told me coming to Alaska was something he had dreamed about all his life. He had finally, in his older age gotten a chance to visit. He didn't come to go shopping in gift stores, he came to touch wildemess. Temsco gave him this opportunity. The power of being a part of this pristine grandeur was life changing for him He was inspired and energized in an intensity he had never experienced before.

This man never could have gotten to this spot on the glacier by himself. He and others should have this opportunity available to them. Access to wilderness is difficult in southeast Alaska and it should not be made more difficult with permit requirements of helicopters.

I am the Program Director for Challenge Alaska Southeast, a recreation program for <u>people</u> with disabilities. Our participants utilize helicopters to access areas otherwise inaccessible,. These individuals have mobility impairments. The experience this offers these folks is very unique. Many places are limited to these folks, as a result of their disability, however their desire to go to these places is not limited. Tempsco and other helicopter companies are an excellent vehicle for these people to experience these remarkable places.

4.1

I have spent extensive time on the Juneau Icefield. I have skied from Atlin to Juneau. I've spent many days and nights skiing, climbing and camping on the Juneau Icefield. It is a very unique and impressive place. Lets share it and other spectacular areas of our National Forest. My experience in the areas that I've visited, is that there has been very little air traffic, if any.

I encourage you to support Temsco in their permit applications. Not everyone can "get there on their own two feet". Those who can't need to go there more than the rest of us.

Thank you for your time

Maureen Riley P.O. 022462 Juneau, Ak 99802

Maureen Riley

4.1

Thank you for your comment.

1050 Caribbeen Wey, Miemi, Floride 33132-2086 305/530-8000 FAX 374-7354

VIA FAX 1.907.586.8808

December 16, 1994

Juneau Ranger District 8465 Old Dairy Road Juneau, Alaska 99801 Mr. Kenneth Mitchell District Ranger

Dear Mr. Mitchell:

We have recently been made aware that the Forest Service is preparing an Environmental Impact Statement for the Juneau Icefield that will determine the level of authorized use for both Temsco Helicopters and ERA Helicopters. Royal Caribbean Cruises is an extensive user of both of these companies.

glaciers around Juneau. Passengers often return from these tours saying they are the highlight of their visit to Alaska. Due to limited time and sometimes limited physical abilities, flight tours In the course of a summer, we send thousands of our passengers on flight tours to the various are the only way for our passengers to see some of Juneau's most beautiful areas

understand that the Forest Service is proposing possible restrictions on landing hours, days of Because of the extremely short season in Alaska, and port time limitations, these proposals could the week, the areas that may be visited and possibly eliminating service completely on holidays. reduce our passengers chances of experiencing these special areas Alaska has to offer.

5.1

will also be sending another vessel, the Sun Viking. Due to the additional capacity generated off of these ships, the limited flight tours are in high demand, specifically helicopters. Next year we are bringing our new vessel, the Legend of the Seas, to Alaska. In addition, we

different proposals regarding the Juneau Icefield permits. In our experience, both Temsco Helicopters and ERA Helicopters have proven to be responsible companies in their dealings with We hope the Forest Service will consider the many cruise ship passengers when evaluating the Royal Caribbean Cruises. In conversations with both companies, it appears this responsibility extends to environmental issues as well.

If you require additional information on our position concerning our support of expanding the HYMBEH use of the Juneau Icefield, please feel free to contact me. Sincerely, Mike Lonar/ed

JONEAU PANGER DISTRICT

Director, Port Planning

Sel 60 MR:ap

Michael Ronan

DEC 58 .84

NIS F & W SEC /

Thank you for your comment.

5.7

Kenneth Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

Dear Ken:

LASKA DISCOVERY Deduated to the Entorment

FORD S TERROR WILDERVESS & Conservation of Alaska's Wilderness • Since 1972 SEA KAYAK EXPEDITIONS

CANOF EXPEDITION

ACCOTZN: WINCH DINEDERNESS NATIONAL MONUMENT ADMIRALTY ISLAND

ALSEN A TATSHEN SHINI RINERS EAFTING EXPEDITIONS

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6.3 ADMIRALTY ISLAND CANORING CI VCIER BAN SEA KANAKING HUNE AU STA AAN AKING

**ADMINISTRATION** RESERVATIONS &

ADMINISTRATION 19071 780-6305 RESERVATIONS (907) 780-6226 ESTATE DRIVE DRIVE SELET HINEAL! ALASKA 99801

TELEFAX 19071 780-4220

0EC 19'94

RANGER DISTRICT

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EIS on Helicopter Glacier Tours, document R10-MB-271. Please include this letter in the record of public comment of the traff

have become an important part of the local tourism economy and, when glacier tours, or the number of helicopter glacier landings. These tours Alaska Discovery is not opposed to increasing the number of helicopter conducted carefully, can be done with minimal impact to the country's natural integrity and with minimum disruption of other user's of the public lands.

6.1

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However, because the number of new helicopter landings on glaciers is quite large, and because a significant increase is proposed for areas that should be paid to the protection of wildlife (especially mountain goats), balanced multiple use by all user groups. To this end, special attention currently have modest helicopter overflight activity, Alaska Discovery and to the protection of public opportunities to experience solitude in authorizing new helicopter landings, consistent with its mission of urges the Forest Service to be conservative in its approach to the majesty of Juneau's glaciers and environs.

the Forest Service be designed so as to avoid and minimize conflict with integrity of our business that new and additional activities authorized by Alaska Discovery would also like to call your attention to our permitted the natural setting for our public excursions. Helicopter overflights can conduct day kayak trips in the Benjamin Island .- Lynn Canal area, and be disruptive to our guests' experience, but if they are routed properly activities on the Juneau Ranger District. We are permitted to conduct multi-night wilderness kayaking and camping trips in Berners Bay, a Congressionally designated roadless area. We are also permitted to day paddles on Mendenhall Lake and River. It is important to the with attention to timing and elevation as well, then most if not all conflicts can be avoided.

Thank you very much for your attention. Sincerely,

John Sisk

6.1

Thank you for your comment.

Please refer to Chapter 1, Significant Issues, and Chapter 4, Issues 2 and 3, of the DEIS for discussions of effects to wildlife and public opportunities to experience solitude.

6.3

Please refer to Chapter 1, Significant Issues, and Chapter 4, Issue 2 for a discussion of effects to recreation users.

December 18, 1995

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

Dear Mr. Mitchell

Re: 1900/2720

DISTRICT BANGER *DEPUTY RANGER* FEC / LANDS F&W\_

We support alternative C as we believe there should be a balance between squamercial tourism use evidence that Alternative D is not just a statement of the level of use that the industry is projecting and local recreational use and residential comfort. Certainly Juneau needs tourisminand imperational not suggest that should be no helicopter flightseeing but consideration to local quality of life must as its future demand. Obviously there is a problem if more people want to take trips that can be also be considered. The report appears superficially to be about compromise but there is little accommodated. The report does not mention the possibility of seeking other destinations to spread out the effects.

:

The problem with alternative E, the satellite heliport, is that it increases traffic over the area where closely-spaced flights. What we don't understand is why consideration isn't given to routing more most recreation takes place. We frankly find it even more trying to take a wilderness walk under the noise of helicopters than to try to hold a conversation with barbecue dinner guests between flights to the south (going and coming) where there is less use-both residential and recreational.

7.2

safety reasons associated with weather patterns. One member of our family is retired and spends a great deal of time outside. He is particularly aware of, and affected by, the high level of day to seeing helicopter use but also to the cumulative effects of mining exploration and development Living on the Fritz Cove Road in the Heintzleman flight path we are not only subject to flightflights-many of which are theoretically routed away from our area but, in fact, often use it for

7.3

We also have some questions about the noise level study as described in the report and as actually conducted. We cannot carry on a conversation outside when the helicopters are flying over. Many of the findings do not make sense in the light of our own experience.

7.4

We thank you for this opportunity to comment on this matter because it does considerably effect the quality of our life here in Juneau. We realize that achieving an balance between competing uses is not an easy task and appreciate your efforts to do so.

Sincerely,

foot M. Afry Julia U. K. W.
Karl M. Hegg Vivian L. Hegg

2950 Fritz Cove Road Juneau, AK 99801

7.1

the impacts to wildlife and ground-based recreation users. Increasing The purpose and need of the proposed action is to meet current public access to remote locations on the Juneau Icefield. Spreading out the destinations of the tours within the Juneau Icefield would increase impact than increasing helicopter use at areas with low helicopter demand for quality guided services which provide safe helicopter the number of flights along current flight paths would have less

discusses the reasons for dismissing Forest Service designated flight Chapter 1, Alternatives Eliminated From Detailed Study, of the DEIS paths as an alternative.

The cumulative effects of other air traffic in or near the routes to the Juneau Icefield are discussed in Chapter 4, Cumulative Effects. This section of the PEIS has been rewritten.

Juneau Ranger District. Please contact John Favro at 586-8800 for a measurements. Also, a copy of the sound study is available at the Please refer to Chapter 3, Acoustical Environment and Chapter 4, Issues 1 and 2, of the DEIS for discussions of the sound

I AM WEITHUG TO COMMENT ON THE, INSTITUTE STATEMENT ON HELLCOPTER GLACIER TOURS, IN THE YOURSS AND JUNEAU TANGER DISTRICT.

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Curtailing hours would not decrease the number of landings since landings could increase during the allowable hours, leading to the same number of flights. The hours presented in the alternatives were chosen as a compromise between the hours currently used and a reduced level.

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Thank you for your comments.

DOUGHAS EXPERIENCE TRAFFIC TO TAKU GLAGIEK,
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December 21, 1994

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

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Dear Mr. Mitchell

one the City and Borough of Juneau needs to address, my comments to you focus on the impact of writing to you in support of Alternative B. As a helicopter pilot and outdoor enthusiast I feel that As stated in your Draft Environmental Impact Statement, the United States Forest Service has no jurisdiction over the noise issue around the airport. While this is a very important issue, and using the glacier areas for recreation and the influence the helicopters have on wildlife. I am I have a point of view worth taking into account when the Forest Service makes its decision.

most of us to retain this opportunity by keeping our distance. For the visitors to Juneau our only wildlife here in Southeast Alaska. Since we as pilots have such an advantage it is a policy with happen to see a bear, wolf, mountain goat etc. consider yourself lucky." With this in mind and with so many things to see during a flight we avoid areas with high concentrations of wildlife, guarantee is spectacular scenery. I regularly tell people "I'm sorry, this is not a zoo. If you do Being a pilot I have been blessed with an excellent opportunity to view the many species of such as the mountain goat birthing areas found in the mountains surrounding some of the glaciers.

I myself become disgusted by the noise encountered on some of the trails under the helicopter flight routes, the Heintzleman Ridge trail being one example. Once a flight has passed overhead, or operations have ceased for the day, a sad realization is that traffic and noise of daily living can still be heard eminating from the suburban valley area. As populations grow the noise grows with it; trekking farther away from the general population to achieve solitude is becoming more of a requirement whether we like it or not. One last thing worth mentioning is that the Juneau Icefield is part of the Tongass National Forest; allowed to be so righteous in denying them the opportunity to use what is rightfully theirs by the a national forest being the property of the public. Even though I personally feel many people do not deserve to witness such beauty due to their lack of respect for something so great, I am not definition of a national forest.

Juneau Icefield. Thank you for taking the time to read my comments in support of Alternative B. I know the Forest Service has many tough decisions to make in regard to helicopter access to the

R. Mike Rawson P.O. Box 210311 Auke Bay, Alaska 99821

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Thank you for your comments.

JÜNEAU PANGER DISTRICT

> Frank W. Bergstrom 6716 Sherri Street Juneau, AK 99801

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RE: Comments on Helicopter Glacier Tours Draft EIS for Helicopter Tours to Juneau Icefield

Dear Mr. Mitchell:

Juneau Ranger District

December 28, 1994

Mr. Ken Mitchell District Ranger 8465 Old Dairy Road

Juneau, AK 99801

Thank you for the opportunity to comment on the important document referenced above. It is significant that the Forest Service should provide for the orderly development of local industry; including the tourism industry, through providing planned access to public lands. Expansion of helicopter glacier tour opportunities to the iceffeld is sorely needed to maintain Juneau as a desirable destination along the inside passage tour ship route.

Speaking as a personal frequenter of the icefield backcountry, no one wants over flights or helicopter landing at will across the icefield, but through the managed approach you propose in the preferred alternative a reasonable coexistence between backcountry users and commercial interests can be struck. However, mitigation measure No. 1 on page 2-11 appears to conflict with this managed balance. If the intent is to limit helicopter air taxi services into the icefield; as was not done before, then an unreasonable impact on backcountry and other user groups would result. Currently, point to point helicopter air taxi service is available when and where it was needed. Should an operator require a special use permit to land where a client wants to land; all other things being equal, both private and commercial non-tour access to the icefield will have been seriously restricted. I uge you not to penalize air taxi service to the icefield for the sake of tour traffic. The two should be allowed to coexist. Please consider eliminating mitigation proposal No. 1 (p.2-11).

10.1

Again, thank you for this opportunity to comment on the Glacier Tour DEIS.

Sincerely yours,

Frank W. Bergstrom

10.1

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.



December 29, 1994

USDA Forest Service, Juneau Ranger District Kenneth E. Mitchell, District Ranger 8465 Old Dairy Road Juneau, AK 99801

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GEFUTY RANGER

Dear Mr. Mitchell:

Environmental Impact Statement

Thank you for the opportunity to comment on the Helicopter Glacier Tours Draft

users are local residents accessing the glaciers for recreation or visitors to the area learning am writing in support of Alternative B - Proposed Action, with removal of the proposed about glacial environments, helicopter landings are an important form of access for the Alternative B provides the most opportunity for public access to the glaciers. Whether mitigation measure to include point to point access in the special use permit counts. public and should be permitted to the maximum extent possible unless negative

environmental impact on the Juneau Icefield. Noise levels in residential areas are found to landings. Moving flight path related noise under Alternative E would impact animals not It has been shown that an increase in helicopter landings would not have an adverse used to noise and users who have shifted their recreation to avoid noise historically be relatively low, and would increase more from forced overflights than increased associated with the MGRA.

charters in the Juneau Icefield that are not authorized under a special use permit. Restricted who want to charter in to cabins or for extended wilderness experiences will likely find the helicopter access will result in a loss for local residents and independent visitors first, as flightseeing tours and landings provide more per capita income to the operators. Persons l am concerned about the proposed mitigation measure to eliminate any point to point service is no longer available.

special use permit. If implemented, the Juneau Icefield will be the only area in the Tongass unprecedented proposed action. The requirement to include all point to point transportation Charter operations providing transportation to National Forest Lands should not require a under the special use permits will result in a loss of access for the public, and primarily National Forest with such a restriction. There is no justification indicated for this that segment of the public that wishes to access the Forest for recreation.

11.2

369 South Frankli Juneau, Alaska Surite 201

(907) 586-1449 FAX

(907) 586-1737

environmental consequences to the Icefield are evident.

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11.1

Thank you for your comment.

11.2

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

December 29, 1994 Mr. Kenneth E. Mitchell Helicopter Glacier Tours DEIS

Page 2

Restrictions mentioned in the DEIS alternatives are troublesome and deserve specific comment. Proposals to limit access to six days per week (Alternatives D and F) or to restrict holiday access (Alternative F) are unreasonable. Memorial Day, the Fourth of July, and Labor Day are three examples of days when the public would be poorly served by such a rule. There are many people who visit Juneau, for one day only, on those days. There is no justification for telling the public that the Forest is closed on holidays. A majority of the year there is little or no traffic on the Icefield. It seems reasonable to make it as accessible as possible during the concentrated visitor and recreation season of May through September.

11.3

Restrictions on hours of access (Alternatives D and F) are similarly unreasonable. Hikers, climbers, and recreators who need transportation in or out of the Forest should not be limited to traveling after 9:00 am or before 6:00pm or 7:00pm when daylight hours don't dictate this kind of limit. Similarly, visitors who arrive in the afternoon and leave the same night or early the next morning would be denied access to the glaciers/Forest for guided interpretation.

11.4

Alternative C, proposed to address noise concerns, appears unwarranted by the environmental findings and would be restrictive to those members of the public wanting to access the Forest by helicopter. Many people were turned away at this level of authorization in 1994. As there is no basis for limiting access to current levels, Alternative C is unreasonable.

Alternative E, calling for a satellite heliport, is grossly unfair to those helicopter companies previously required to locate within the airport area. This alternative would simply move the impacts it was written to address to a new area. This would be unfair to the operators, residents impacted under the new flight paths, recreational users in the new flight path area and the wildlife located in the new flight path area.

11.5

I support implementation of Alternative B - Proposed Action. It is the most reasonable alternative put forth in the DEIS. I would support additional increases in landings, above those outlined in Alternative B. I do not support requiring all point to point access to count under the special use permits and believe this requirement is unfair to the public. I do not support restrictions on days of the week, holidays, or daily access hours.

Thank you again for the opportunity to comment on the DEIS. Please do not hesitate to contact me if I can clarify my input further.

Sincerely,

Kari Westlund President/CEO

11.3

Thank you for your comment.

1.4

Restrictions on the hours of landings would apply only to helicopter glacier tours. The FEIS does not include restrictions on point to point landings.

11.5

The reasons for including Alternative E are discussed in Chapter 2, Alternative E, of the DEIS and the consequences are discussed in Chapter 4, under Issues 1, 2, and 3.

#### Ron Maas 311 Greening Avenue Junean, Alanka 99001

January 3, 1995

U.S. Forest Service 8465 Old Delry Road Juneau, Alada 99801 I have finished looking over the EIS pertaining to the increased hellcopter traffic in the Taku Infet area of the humans too FRed. I live at Bullards Landing which is about 100 yards across the Taku River from the Taku Glascier. We bought the Bullard homested of 150 acras over the past 15 years and put a log house on it in 1991. This is our home from May through September.

The appeal this lead held for us of course was the quiet and remoteness. Although we were aware of the fixed wing traffic it didn't bother us very much as their flight path took them to the west of us, across the river. As the heldcopter traffic increased, there bozame a severe air traffic problem between the fixed wing planes taking off down river and the helicopters coming as them up river at a very low altitude. That, of course, pushed the fixed wing aircraft loward the east river bank, almost overhead of our bone.

The fixed wing aircraft sound is fairly acceptable with a much softer sound than the jet engine scream and whump, whump of the jet belicopters that you can hear for miles. When they are necarest to us they fly at an an altitude of 200 to 300 feet. Their notise reverberates from the face of the Taku Glacier and the Brasslere bills directly over to us and it seems they never stop. They come from landing on the Norris Glacier heading for Sockeye Flats in lines of as many as 9 in a row. It sounds like a battle zone. Then add one landing at Swede Point to they people the Russian Eagle, not bother to stop their engine and we listen to that notice while their passengers walk up to see the eagle.

I have my own aircraft and I fly in and out of the valley quie often, and believe me it's not much fun. It's a marrow conforts and at times there are as many as 20 aircraft operating there at one time. A very dangerous situation. In the past two years I have had three very close encounters with helicopters. On one occasion I had to make an emergency mannerver in order to avoid a helicopter who was going to look at these moose on Grizzly Bar. These close calls I have had are due to the pilots not listening to their radio, but aitludg to their passengers. They seem to have the aitlude, we're helicopters, so stay out of our way, I tobject to this as I have been flying my habitual routes for many years but now it's becoming too darned danned dan

One of the main concerns that my family has centers around the wildlife that call Taku Valley their home. We have observed the decline in the moose, bear, and eagle population in the valley since we have lived there by the past 22 years. I'm sure you have noticed the reaction of the wild animals when a low flying alreast flies over or circles them, especially helicopters. They get very upset and panic as you well know. The plots asturally wast to show their passengers a closer look and I have observed this practice time and time apain in the Taku Valley.

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12.

Vehicular traffic, including small private boats, small and large tour boats, small airplanes, and helicopters, has increased throughout southeast Alaska. Although bears are still seen regularly along the coast, particularly in spring, it appears that numbers of sightings are much lower. The higher levels of human activity have probably caused changes in distribution and use patterns exhibited by not only bears, but most large mammals. It may not be that populations of these animals (moose, bear, eagls) are declining, but in areas of high human activity, they may not be as visible as they were 10-15 years ago.

In situations where regular flight paths are followed and distance from wildlife of at least 1000' are maintained, wildlife move from the flight path or habituate to the activity. We have on many occasions observed panic reactions in goats, brown bears, black bears, moose, and wolves when fixed wing or helicopters fly low and circle these animals to get a good, closs look. Helicopter pilots who fly glacder tours for local companies are expected to follow flight paths (weather dependent). They are also expected to maintain 1000' distances from wildlife and avoid circling or pursuing wildlife. The Forest Service can only recommend these measures which would require that helicopter companies and pilots act in a professional manner and avoid unnecessarily disturbing wildlife.

As mitigation under the terms of the permit issued, it is also extremely important to educate the public who files with these companies regarding inappropriate behavior like circling or pursuing wildlife. Increasing clients' awarensss of stresses placed on wildlife as a result of this type of activity will encourage more responsible viewing. Informed visitors would be less likely to encourage pilots to approach closer than appropriate, and might even "police" pilots who would otherwise get too close.

U.S. Forest Service December 23, 1994 Page 2

One of the prime game targets for the helicopters in the Taku Valley are the hair seals as they lay on the path to fly over in order to show their passengers the female seals pupping on the sand bars. When they do this they are not only disturbing the seals but are deviating from their flight path. When they do this they are no longer on their proper flight path and present a severe hazard to other aircraft in the sand bars resting and pupping. Time and again I have observed helicopters leave their prescribed flight immediate area. Again, I have had several close calls due to helicopters not being where they are supposed to be.

12.1

long before the helicopters decided they wanted into the act. The Forest Service gave them a permit for a few landings on the glaciers. As the years went by the helicopters started pushing the fixed wing aircraft the valley with a total of about 15 helicopters on a regular basis. At times there will be 20 aircraft operating in the narrow Taku Valley at one time. It's no longer a wildemess experience but more like an out of their way and becoming a real safety hazard. Now we have three operators flying helicopters into I started flights to Taku Lodge many years ago and advertised it as a wilderness experience. This was air show, only twice as dangerous.

area. It's your responsibility to take control of a problem that has gone too far aiready and must stop. Not only for the safety of the passengers but for the sake of all the animals that call the Taku Valley their home, my family included. There are too many helicopter flights now. You must decrease the number of You are the only person that can limit the flight hazards and impacts to wildlife that exist today in that landings, not increase them.

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Thank you for your comment.

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Juncau Ranger District Juncau, Alaska 99801

To: Kenneth E. Mitchell

From: Bruce Griggs P.O. box 20862 Juneau, Alaska 99801 (907) 789-5286 re. point to point charters Juneau ice fields.

Pear aire

I am writing this letter to protest the forest service conclusion that point to point charters to the Juneau ice fields need to be abolished. As I understand a recent Environmental impact statement done on helicopters and the Juneau ice fields states that point to point charters is becoming a problem and should therefor be abolished. Should this rule be adopted and made policy the only people this is going to hurt are the local people who use this area for recreation. Unless one is a world class athlete with lots of time, the only way to access this area is by helicopter or plane.

So basically what the forest service is saying is that its ok. for thousands of tourists to enjoy this unique area but not a handful of local hikera, climbera, and skiers. I can understand the need for controlling the number of flights going in during the tourist season but this has been done through the vigorous permitting process adopted by the Forest service. The companies doing tours, who are abiding by the rules set forth by the permit process are performing a great service to the community, tourism, and the Forest service. If some companies are abusing the point to point charter concept by doing tours that should be done under a permit, then the Forest service ahould deal directly with those problem operators, instead of burning the locals who have enjoyed the freedom of point to point charters for year. Our recreational happiness and future lie in your hands, please give this matter more consideration.

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Bruce Griggs

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13.1

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

PANGER DISTRICT JUNEAU Albert H. Clough P.O. Box 241003 (907) 586- 1946 Douglas, Alaska 99824

3 January, 1995

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Juneau Ranger District 8465 Old Dairy Road Juneau, Alaska 99801 Mr. Ken Mitchell District Ranger

Dear Ken.

This letter is in response to the Draft Environmental impact Statement (DEIS) your office is conducting on Juneau Icefield helicopter tours. Specifically I reference ERA, Coastal, and TEMSCO helicopters request for 5-year special use permits to continue tour operations.

### GENERAL COMMENTS

I fully support these helicopter companies, along with fixed wing operators, which are offering tours of the Juneau Icefield. These tours encouraged. Further, helicopters provide the most environmentally provide residents and visitors alike the unique opportunity to view. experience, and learn about the Juneau Icefield and should be benign and safe access possible to much of Alaska, especially in regions of challenging terrain such as the Juneau Icefield.

occasional ski and mountaineering trips. I am not aware of any negative impacts brought on the Juneau leefield by any of these helicopter tour operators. Noise related to aircraft activity, to include Icefield tours, has been of selected concern within various Juneau minimize such concerns. In recent years real progress has been made residential areas. However, helicopter and fixed wing operators have student and for the past 10 years as a staff scientist, with the Juneau ceffeld Research Program. In addition, I also utilize the Iceffeld for have been active on the Juneau Icefield for over 25 years, first as a been cooperating with all parties to eliminate or, at the very least, in lowering noise impacts over what they were several years ago.

My personal residence is the closest neighbor to ERA Helicopters North Douglas base. Although the frequency of flights for Icefield tours has dramatically increased in recent years the increased helicopter and subordinate motorcoach traffic on the North Douglas highway has not negatively affected my life in any way. The use of larger, quieter helicopters combined with company adherence to noise abatement flight paths assures that ERA continues to be a responsible neighbor.

Airport area. An airport is by its very nature a noisy place. Residents and business within the airport area and standard approach/ departure paths must expect various amounts of low altitude air traffic with associated noise levels. Nevertheless, both TEMSCO and Coastal Helicopters routine use of larger quieter helicopters has greatly diminished noise concerns which were common several years ago with high usage of Hughes 500 type helicopters. Recently, ongoing cooperation with FAA- Juneau Air Traffic Control has resulted in the use of modified and varied flight paths for helicopter tours which has greatly reduced noise concerns in the Mendenhall Valley and Lemon Creek areas. Similar efforts in effect for fixed wing departures have likewise reduced noise complaints.

Further, as a private pilot who commonly shares airspace with the various Icefield tours I have found all of the helicopter and fixed wing tour operators to be very safety conscious, especially so when operating within congested airspace in and adjacent to Mendenhall Valley/ Montana Creek along with the busy downtown and Taku River corridors. I routinely transit the Taku and Montana Creek corridors and note that all commercial operators follow established procedures to enhance safety and minimize impact to nearby residents. These commercial operators continue to show a willingness to work with each other and general aviation to assure safety for all. Traffic conflicts have been isolated and readily resolved. Changes in radio frequencies implemented in 1993, especially for downtown Juneau and Taku, have significantly enhanced safety.

Flight paths for tours have been chosen and modified to maximize safety and minimize noise concerns. With the utilization of larger and quieter helicopters (similar improvements for float plane tours off the Juneau Harbor) safety has been enhanced and noise has been further reduced. It is also fundamental to note that such air traffic issues have been closely coordinated and established through the FAA in cooperation with local aviation interests. The Forest Service should be extremely cautions before moving into areas of air traffic and air safety for which other federal agencies not only have legal responsibilities, but also much more expertise.

The City and Borough of Juneau (CBJ) Assembly established an ad-hoc noise committee during 1993. This citizens and aviation industry

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group was charged to investigate aircraft noise concerns in the Borough (along with a variety of other noise issues). The committee was especially interested in the Mendenhall Valley and Downtown Juneau noise problems. Conclusions from the CBJ Noise Committee work support the contention that the usage of quieter aircraft combined with new and varied flight paths has greatly eliminated aircraft noise problems in many of the residential and downtown areas. Noise studies conducted by the Forest Service, which are referenced in the DEIS, reach similar conclusions as did the work of the CBJ.

leefield helicopter and fixed wing tours provide significant economic benefits to Juneau through the tourist draw and the direct employment. Much of this is a year round benefit since all of the helicopter and airplane operators are Juneau based. Although the summer tour season is the most busy, significant employment is offered year round in relation to maintenance and training for tour related activity. The larger number of aircraft (both helicopter and fixed wing) based in Juneau as a result of Icefield tour activities also provides benefits to all aircraft service uses in the region with enhanced aircraft availability and competition.

# COMMENTS SPECIFIC TO THE DEIS

## Summary. Issue 3- Wildlife:

This section indicates helicopter activity has been low or nonexistent in the Gilkey Glacier, Eagle Glacier, Death Valley, Herbert Glacier, and Taku Glacier areas and that increased activity would result in the highest impact to mountain goats and other wildlife. Seasonal helicopter operations in the Gilkey Glacier, Death Valley, and Taku Glacier areas has been commonplace since the early 1960's in support of the activities of the Juneau Icefield Research Program (JIRP). Specifically, Death Valley is along the main flight path for logistical support of JIRP operations from Juneau. Similarly, the Taku Glacier corridor is the main supply route to the Icefield during low visibility. The Taku River Taku Glacier Terminus is also along the main air traffic route from Juneau to Taku Lodge and onward to the upper Taku River and Atlin. British Columbia. This corridor has seen extensive air traffic since airplanes first appeared in the north. Wildlife along this corridor must of been habituated to transiting air traffic many years ago. Gilkey Glacier is a commonly used access corridor for JIRP activities on the western and northern portions of the Juneau Icefield. It is incorrect to characterize past helicopter usage in these three areas (Gilkey, Death Valley, and Taku) as low or nonexistent. Past helicopter activity on the Eagle and Herbert Glacier could accurately be characterized as low or intermittent. However, it is important to

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Thank you for your comment. We will be contacting JIRP to try to determine the number of flights they conduct each summer in the Gilkey Glacier and Death Valley area. It is our impression that this level of existing activity is significantly lower than what has been proposed as a 1999 level by the local icefield tour operators. The information has been added to the Cumulative Impact section of Chapter 4 in the FEIS. We are aware of the extensive air traffic along the Taku River corridor - this is also discussed in the Cumulative Effects section of the FEIS. We did not classify or define the Taku Corridor as an area of low or non-existent activity. Wildlife along this corridor is probably habituated to regular flights that maintain adequate distance from willlife, provided circling, low approaches, and pursuit of wildlife does not occur. The already extensive use indicates that increasing use in this area is as much a safety concern as a wildlife issue. This falls under the jurisdiction of the PAR.

### Chapter 1, page 1-1:

TEMSCO's heliport is located at the northeast end of Juneau International Airport, not the northwest end as indicated in the text. Similarly, ERA's heliport is at 4- mile North Douglas, not at 3- mile as indicated in the DEIS.

14.2

# Chapter 2, page 2-11, Mitigation:

The mitigation section is perhaps the area of most concern in the entire DEIS. Recommendations developed in this section were not raised as part of the initial scoping document, nor were these recommendations part of previous EA actions in regard to Juneau area, helicopter access issues. Following are detailed comments specific to the mitigation recommendations.

sttes. Likewise, a small but important number of Juneau residents and private recreation activities such as helicopter sking, mountaineering, hiking, and sightseeing, restricting such activities is totally without basis. Although this section allows non-permitted helicopter access to prescription in TLMP and similarly classified in the Juneau State Land This restriction will affect mineral exploration throughout the central portions of the Juneau Gold Belt, an area designated by a mineral apply to other governmental agencies such as the State of Alaska, City and Borough of Juneau, Federal Agencies such as USGS, USBM, NMFS, flights within the Juneau area (as shown on Map 1) has severe effects plan. Such a restriction would also affect routine maintenance along AELP electrical transmission lines and various telecommunications established JIRP camps, JIRP routinely establishes tent camps and seasonal caches which are supplied by helicopter. Under this restriction access to these important areas would require a permit. on a whole variety of activities far beyond those of helicopter tours. Finally, it is uncertain how the special use permit provisions would Requiring a special use permit for any commercial (for pay) visitors alike charter helicopters throughout the year for diverse USFWS, and USCG. All of these agencies have reason to have helicopter activity in the region delineated under Map 1.

14.3

The requirement for special use permits is also unclear on who will be responsible for the permit. It is not clear whether the special use permit will be the responsibility of the helicopter company under their permitted number of flights for the season as a tour operator or will it be the responsibility of the person chartering the helicopter.

14.2

This change has been made.

14.3

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

Furthermore, and perhaps more fundamental, no demonstrated cause and effect which requires mitigation has been demonstrated concerning helicopter tours versus other helicopter charter operations. Finally, it remains most elusive how the proposed mitigation which cover all helicopter operations will make any difference on tour operations impacts.

The regulation of repetitive, guided scheduled tours is likely sound public policy and necessary. However, the restrictions suggested for other helicopter activities is not supportable, would establish significant burden on anyone using a helicopter for a variety of business and private purposes throughout the Juneau Borough, along with increasing the administrative burden on the Forest Service. I am totally opposed to the tenants of this section and urge the Forest Service to abandoned this tack. Restricting non-tour flights will do nothing to mitigate tour related impacts and should not be tied to such issues.

14.3

The crux of the regulatory issue appears to be the difference between helicopter tours which involve frequent, repetitive flights as opposed to helicopter charter and contract work in which the helicopter flight is predominately a transportation role much as a 4- wheel drive vehicle is the common transportation vehicle utilized on National Forest lands in the southern 48 states or as small boats are utilized for direct access along the coast. The utilization of motor vehicles and small boats do not require a permit for access nor should the use of helicopters where they represent the only reasonable cost effective transportation similarly require any special use permit. Their is a fundamental difference between guided repetitive tours and other legitimate commercial and private uses of helicopters in the Juneau area. The final EIS needs to be developed with this difference paramount.

2. Mitigation Guideline 2, requires coordination with FAA and operators under a Forest Order. The FAA and aviation users are already doing such; a Forest Order is not necessary.

3. Mitigation guidelines 3 through 9. All of these measures are in regards to wildlife. I have no objection to avoiding disturbing wildlife when and where possible. However, these mitigation measures presuppose that helicopter activity is deleterious to general wildlife. I would challenge that aircraft activity, both helicopter and fixed wing, has not been so. The main flight corridors of question in this DEIS have had transiting aircraft for many years; and as indicated in the DEIS wildlife is generally habituated to transiting air traffic. I do concur that repetitive low level circling or low passes over wildlife should be discouraged.

14.5

14.4

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

4.5

Wildlife and noise mitigation measures were developed in deference to weather conditions and other air traffic limitations. We would not, and could not, suggest that these mitigation measure be carried out if they caused threats to the safety of passenger. We recommend flight paths with wildlife mitigation in mind. We do not expect rigid compliance under adverse weather conditions. We respect the professional judgment of pilots to make prudent and appropriate decisions regarding safety.

pilots stop by the helicopter company office and either mark locations animals seen) and provide observation to the Forest Service at the end while they are flying, nor do they conduct intense visual searches for of the tour season. This report is short - generally 2-3 typewritten this information has been a problem. Pilots do not map the locations pages. The helicopter companies have never indicated that collecting least 6 years. The procedure is not complex. At the end of the day analysis, nor are they "wildlife censuses". They do provide general compile these sighting locations (including species, and number of Helicopter pilots have been reporting wildlife observations for at Service, or write down a sighting location name. Office personnel of wildlife sightings for that day on maps provided by the Porest Service will soon have the ability to input this information on a information regarding general distribution patterns that we would Geographic Information System. The sightings cannot be used for wildlife. Therefore, safety should not be compromised. Forest otherwise not have.

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The wildlife and noise mitigation measures must be developed in deference to stress of weather and other air traffic limitations. Weather conditions commonly dictate that aircraft must fly closer that 1000' and/ or 1320' from the shoreline or ground. Similarly, flight paths for aircraft (helicopters and fixed whigh have been developed with safety foremost in mind giving deference to the capabilities of the various types and classes of aircraft. Rigid adherence to the guidelines suggested in this section would concentrate helicopter and fixed wing traffic in a confined airspace; which in adverse weather and visibility would become even more concentrated. The negative safety considerations are obvious. Safety considerations for aircraft must take a more senior role in this DEIS.

14.6

The requirements for wildlife counting and reporting by the pilots are unreasonable. The primary purpose of the pilot is to safely operate the aircraft, not count and plot bears, moose, and goats. Should the Forest Service be interested in a wildlife census it should conduct its own. Any involvement by the tour operators should be voluntary, or at the least, on a much more simplified basis which does not place an undue burden on the pilots or the company.

14.7

The weight given to wildlife and lack of concern shown to pilots and passengers safety in the DEIS is the reason why the FAA must continue to be the federal agency which regulates air traffic, and not the USFS.

### Chapter 2, Alternatives:

I support Alternative B, the proposed action. This alternative allows the three helicopter companies which have made substantial investment in Juneau Icfield helicopter tours to continue to conduct their business. This alternative also allows one operator, Coastal Helicopters, access to a significant number of permitted landings. Under the current system Coastal only has a minimum amount of permitted tour landings. All of the other alternatives contain restrictions and limitation which would severely impact these businesses. Nevertheless, noise; especially the repetitive noise generated by helicopter tours is of concern to many residents. I recommend the Forest Service take the following measures with Alternative B as a reasonable course of action to continue to lessen noise impacts of the repetitive tours.

14.8

1.) The best way to minimize impacts of helicopter flights is to carefully select flight paths for the repetitive flights. Much has already been accomplished with route selections. Nonetheless, tour operators, Forest Service, and the FAA should continue to refine these high use flight paths. This is especially important as new tour routes are developed.

9

14.6

The mitigation has been reworded. Please refer to Chapter 2 of the FEIS.

14.7

The mitigation has been reworded. Please refer to Chapter 2 of the FEIS.

14.8

The Forest Service has no control over flight paths. However, we have encouraged helicopter tour companies to work with the public to resolve problems regarding the flight paths.

and the highest number of noise related complaints. Should any site receive restrictions or caps on number of landings this one is the most supportable. However, Should TEMSCO be restricted on the number of Mendenhall Glacier landings, an equal number of landings should be allowed in similar areas, such as the Herbert, Eagle, Lemon, or Thomas Glaciers.

14.9

3.) The Forest Service should develop an incentive program to encourage operators to lower the overall number of repetitive flights over the Mendenhall Valley, especially the West Valley which is used in low celling conditions that prohibit flights over Heintzleman Ridge to the Mendenhall Glacier site of TEMSCO (flights which use the Lemon Creek- Heintzleman Ridge route have minimal impact on Mendenhall Valley and should be encouraged rather than limited). Similarly, credits could be made available for the use of quieter helicopters. Most Icefield tours are currently made using American Eurocopter AS 350 variant helicopters which are significantly quieter than the smaller McDonald Douglas and Bell machines. Operators should be given credit for making the investment in such technology incentives could also apply should newer quieter helicopters become available.

14.10

#### SUMMARY

Icefield helicopter tours offer a unique and popular option for Juneau tourist and residents. The negative impact is negligible and all of the operators have show a willingness to work out problems with concerned parties. I urge the Forest Service to adopt alternative B, and issue revised 5- year special use permits to Coastal, ERA, and TEMSCO as outlined under alternative B.

14.11

In addition, I urge the Forest Service to closely reexamine the suggested mitigation requirements, especially the requirements which effect non-tour operations.

Thank you for this opportunity to comment.

Sincerely (Minerally Manuel Minerally Minerall

14.9

The Forest Service has no control over flight paths. Therefore, if landings were moved to other areas of the Iceffeld, the flight paths could still be similar. Also, moving the landings would not remove flights from over residential areas but would just shift the impacts to different residences.

1.10

As new helicopters are developed and utilized, the effects would be analyzed to determine if the number of landings should be changed.

14.11

Thank you for your comment.

7

January 5, 1995

Mr. Kenneth Mitchell District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

RE: Temsco Helicopters and ERA Helicopters/Juneau Icefields

Dear Mr. Mitchell:

As one of the largest tour operators in the State of Alaska, I am writing in support of Temsco and ERA Helicopters' application to conduct helicopter glacier tours in the Juneau Icefield area. As the Vice President of the Transportation Division for Holland America Line Westours responsible for the Gray Line of Alaska subsidiary, it is vital to our operations that Temsco and ERA be allowed to offer a wide variety of helicopter tours to the tourists that are brought into Alaska.

Tourism is one of the largest industries in Alaska. The Forest Services proposed limitations on the helicopter flights to the icefields are very restrictive to our clientele. Our passengers arrive on various ships on a daily basis. The limitations proposed would effectively eliminate the opportunity for our passengers to see a variety of places while in the Juneau area.

Our clients do not have the opportunity to live in Alaska, nor spend extended periods of time. They want to see as much of Alaska as they possibly can within the time frame they are there. Guided tours are the safest way to explore parts of the country that are normally limited to a very select few.

It is our belief that the government set up National and State parks to preserve the wilderness for future generations to see and experience. It is my impression that this was done for the good of all people, not just the select few who live and work in the area of the park. Guided tours allow all types of people the opportunity to visit our national parks on a controlled basis. The guides make sure that nature is left the way it was found when they arrived. I believe that the impact of Temsco and ERA helicopter tours on the Juneau Icefields would be negligible.

15.1

Thank you for your comment.

300 Elliott Avenue West • Seattle, WA 98119 • 206 • 281-3535 • Fax: 206 • 281-7110

In closing, I hope that you will consider granting the permits necessary for Temsco and ERA Helicopters to offer a variety of helicopter tours to the Juneau Icefields. If you have any questions or need further information, I can be reached at (206) 281-0505.

15.1

Sincerely,

Transportation Division Gordon F. Barr Vice President 16.8-

GFB/jce 137.16

cc Bob Engelbrecht - Temsco Helicopters
Paul Stouffer - Holland America Line Westours



Mr. Ken Mitchell, District Ranger Juneau Ranger District Tongass National Forest

R465 Old Dairy Road Juncau, AK 99801

Dear Mr. Mitchell:

26. 6 0 NT

RANGER DISTRICT

Please consider the following remarks concerning Helicopter Glacier Landings from your Draft environmental impact statement.

First, I support the concept of proposed action, Alternative "B". However, I do find it somewhat confusing, in that the original documents were for "service days," and we are now talking

How many "service days" equal each "landing," and what formula was used for each landing? As you know, Coastal Helicopters operates Bell 206 helicopters and our average occupancy is three; whereas ERA and Temsco use Eurocopter ASTARS and probably have an average occupancy of five or more.

The requests for landing sites and service days were submitted almost two years ago, and were only projections thru the year 1999. I believe there should be a provision for revisions earlier than 1999. Projections for that length of time should be updated as additional information is gathered, such as the number and size of cruise ships that are coming to Juneau. Another concern, is which landing site is going to be the best suited for given years, and customer desires. I would like to see a system where you have areas of operation, but no restriction on the number of flights to each area. This will allow vendors to sell sites that will have the least amount of impact on the recreational user, as well as the most popular sites or those sites that are safer for the proposed activity. Flexibility is the key!

All alternative charts depict maximum number of landings, as does the proposed alternative, however, in the preferred alternative, the Eagle Glacier and Death Valley areas are deleted. If this alternative were to be selected, would it delete those landings from the total number of landings each company has requested? I would assume not since the total number of proposed landings remains the same in all tables. Where would the proposed landings be moved to? Again, I assume they would be of equal distance to the base of operations for each company. I have been flying in

LOCATED ON THE JUNEAU AIRPORT

16.1

Under the Council on Environmental Quality regulations in 40 CFR 1502.9; "environmental impact statements shall be written in plain language....so that the public can readily understand them". Service days are an agency term often misunderstood by the public. Landings is a more concise and easily understood term. We chose to use landings as a basis of this analysis because it can be readily understood. The permit will contain service days.

6.2

Request for service days beyond those in the DEIS will be considered anytime, however, they could require a new environmental analysis.

16.3

Alternative G has been added to the FEIS. This alternative would have the same number of landings as Alternative D but no landings would be allowed in those areas. The landings proposed for Eagle Glacier and Death Valley would be reallocated to other landings zones for this alternative only.

the Juncau area for 26 years and the only activity I have observed in Death Valley and Bagle Glacier have been either associated with the Ice Field Program or the occasional helicopter supported activity. I can't imagine ERA landing tours close to one of Dr. Millers sites or routes. I have yet to see anyone on the upper Bagle Glacier except for people that have been dropped off belicopter. I selected Bagle Glacier because of its remoteness and the fact that it is not a frequently used glacier. I believe it is important to remember that if helicopters do not land, they will still be in the area and will generate the same impact or more. If helicopters land, it will probably reduce the impact because the actual flight time over those areas will be shorter.

16.3

The noise issue is a City and Borough of Juneau issue, and should be left to the local government to decide if, when, where, and how helicopter and airplane noise will be handled.

16.4

I do not agree with the proposed requirement to control all flights into National Forests. We work with miners, communication companies, power line workers and local recreation enthusiasts. To require permitting for these activities would result in unnecessary time and expenses. Permits are land. This study should focus only on helicopter landings on national forest land (glacier landings) in conjunction with the numerous visitors coming to Juneau to walk on a glacier or associated areas.

6.5

Thank you for the oportunity to respond to the draft environmental impact statement.

Sincerely,

COASTAL HELICOPTERS, INC.

un Wilson, President

16.4

Although the CBJ is the responsible authority, the Forest Service is required by the CBQ regulations in 40 CFR 1508.25 to show the impacts from connected actions outside the jurisdiction of the agency.

2

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

| January 9, 1995 | Mr. Kenneth E. Mitchell | District Ranger<br>Juneau Ranger District | 8465 Old Dairy Road<br>Juneau, AK. 99801 |
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Princess Tours strongly supports Alternative B as presented in the Draft Environmental Impact Statement (DEIS) for Helicopter Glacier Tours to the Juneau Icefield.

Our support of this alternative is based on two primary factors. First, Helicopters provide greatly minimizes the environmental impact of thousands of visitors attempting to experience the excitement of walking on a glacier on their own. Second, the 1993 noise study in Juneau stated that the effect of aircraft noise on residents and wildlife is a "non-problem". to walk on a glacier regardless of age or physical abilities. Flightseeing tours, using a helicopter, are among the highest rated visitor experiences in Alaska and are often regarded as the highlight an excellent and environmentally sound way for visitors to experience first hand the opportunity of their Alaskan vacation. Furthermore, using a helicopter with a professionally trained pilot

Therefore, based on the above, I would highly recommend that alternative B be approved and that ERA Helicopters be given increased landing permits to operate commercially guided helicopter glacier tours and heli-hiking tours in the Juneau Icefield area.

Please don't hesitate to call on me if I can be of any assistance in the future.

Timothy P. McDonnell

Lin hi Forme

Vice President, Alaska Operations

17.1

Thank you for your comment.

JUNEAU
RANGER DISTRICT

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Donna Hudgeon 1016 Edwin Place Juncau, Alaska 99801 JANUARY 9, 1995

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

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C'STRICT RANGER

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Dear Mr. Mitchell:

This is a request that you approve the five year permits as outlined in Alternative B of your Draft Environmental Impact Statement.

Not only is the tourism industry an important part of Juneau's economy, but they are also an environmentally safe way for visitors to experience true wilderness.

18.1

Studies of noise impact have confirmed that helicopter noise in insignificant on the community as a whole and has no adverse impact on wildlife. It is important to be able to share our beautiful State with visitors and residents who would otherwise not have the opportunity to see these sites.

Also, regulations being considered should not impact other traditional uses such as hiking, mineral exploration or helicopter flights into the National Forest. With very few exceptions, those who choose to use the wildemess and National Forests value the pristine environment and additional regulations are not necessary.

18.2

Your prompt consideration and approval of Alternative B is appreciated.

Donathologen

18.1

Thank you for your comment.

18.2

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

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Dear Mr. Mitchell:

This is a request that you approve the five year permits as outlined in Alternative B of your Draft Environmental Impact Statement.

Not only is the tourism industry an important part of Juneau's economy, but they are also an environmentally safe way for visitors to experience true wildemess.

19.1

Studies of noise impact have confirmed that helicopter noise in insignificant on the community as State with visitors and residents who would otherwise not have the opportunity to see these sites. a whole and has no adverse impact on wildlife. It is important to be able to share our beautiful

Also, regulations being considered should not impact other traditional uses such as hiking, mineral exploration or helicopter flights into the National Forest. With very few exceptions, those who choose to use the wilderness and National Forests value the pristine environment and additional regulations are not necessary.

19.2

Your prompt consideration and approval of Alternative B is appreciated.

PETE Hudson

17103 LENCA LOST Rd

JUNKAY AK 99601

19.1

Thank you for your comment.

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

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Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

TOUC PLANNER

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Dear Mr. Mitchell:

Please approve Alternative B for your DEIS at the proposed level for helicopter landings. Our vast ice field can be shared by the local helicopter companies without impacting the environment and will provide an opportunity for the elderly and the handicapped to enjoy wilderness. Without helicopter flights they will be denied this opportunity.

It is important that local businesses be allowed to plan ahead for summer tourist activities, so your early decision will be helpful to the community and to the businesses involved.

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20.1

Thank you for your comment.

20.1

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

Dear Mr. Mitchell:

Helicopter landings on the Juneau Ice Field have been studied and studied over the years. They continually prove to be an environmentally safe way for visitors to experience the forest. Glaciers don't require roads, trails or other maintenance. Elderly and physically handicapped citizens can experience this beauty which might not otherwise be available to them.

21.1

Please approve Alternative B of your Draft Environmental Impact Statement.

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Thank you for your comment.

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Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

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Dear Mr. Mitchell:

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| This is a request that y |  |
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Not only is the tourism industry an important part of Juneau's economy, but they are also an environmentally safe way for visitors to experience true wilderness.

22.1 Studies of noise impact have confirmed that helicopter noise in insignificant on the community as a whole and has no adverse impact on wildlife. It is important to be able to share our beautiful State with visitors and residents who would otherwise not have the opportunity to see these sites.

Also, regulations being considered should not impact other traditional uses such as hiking, mineral exploration or helicopter flights into the National Forest. With very few exceptions, those who choose to use the wilderness and National Forests value the pristine environment and additional regulations are not necessary.

22.2

Your prompt consideration and approval of Alternative B is appreciated.

Box 20254
SunEar, AK 99802

22.1

Thank you for your comment.

2.5

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

Dear Mr. Mitchell:

Helicopter landings on the Juneau Ice Field have been studied and studied over the years. They continually prove to be an environmentally safe way for visitors to experience the forest. Glaciers don't require roads, trails or other maintenance. Elderly and physically handicapped citizens can experience this beauty which might not otherwise be available to them.

Please approve Alternative B of your Draft Environmental Impact Statement.

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Thank you for your comment.

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

Dear Mr. Mitchell:

Please approve Alternative B for your DEIS at the proposed level for helicopter landings. Our vast ice field can be shared by the local helicopter companies without impacting the environment and will provide an opportunity for the elderly and the handicapped to enjoy wilderness. Without helicopter flights they will be denied this opportunity.

It is important that local businesses be allowed to plan ahead for summer tourist activities, so your early decision will be helpful to the community and to the businesses involved.

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Thank you for your comment.

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DEPUTY PANGER

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International

January 12, 1994

Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801 Kenneth Mitchell District Ranger

Dear Kenneth

I would like to take this opportunity to express my concern over the proposed restrictions to operations of both Temsco Helicopters and ERA Helicopters in the Juneau Icefield area.

numbers seems inappropriate. In addition, our cruise passengers have a very limited amount of time to experience Juneau and its surrounding areas so placing restrictions on hours of operation or even eliminating days that tours are available is not fair to visitors who may never again have this opportunity. In 1995 Regency Cruises will be expanding its Alaskan Cruise operation by 50%, increasing the number of passengers to more than 44,000. We have worked closely with both Temsco and ERA over the past four years and they have provided many of our passengers with an experience of a lifetime. Due to the increase in the number of visitors to Juneau in 1995 placing limits on flights based on 1994

I would also like to express my concerns over strict restrictions and regulations over Federal Lands. As a Board Hember for the Alaska Visitors Association I am concerned over this shift in control. It was my understanding that National Park Land had limited visitor access not National Forest Land. It is my recommendation that the permit request be approved for renewal in order to allow all visitors Juneau equal opportunity to experience its many varied and unique attractions.

Ting alore Sincerely,

Tim Worthen Vice President

Physical Address 109 W. 6th Avenue, Suite 200 Anthorage, Alaska 99501-2570

Telephone: (907) 279-0001 Telefax: (907) 279-0002

Mailing Address PO. Box 211969 Anchorage, Alaska 99521:1969

25.1

analyzed in the DEIS to show the effects of the companies' proposals A range of alternatives, including day and hour restrictions, were and alternatives to those proposals.

25.1

#### RANGER DISTRICT

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| NEIL MACKINNON | 1114 GLACIER AVE. | INFALL AK DORAL |
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KENNETH E. MITCHELL DISTRICT RANGER JUNEAU RANGER DISTRICT 8465 OLD DAIRY RD JUNEAU, AK 99801

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C'STRICT RANGER

DEPUTY RANGER

JANUARY 12, 1995

RE:HELICOPTER GLACIER TOURS

HAVE PLANNER

DEAR MR.MITCHELL

PLEASE MARK ME DOWN AS SUPPORTING ALTERNATIVE B WITH THE FOLLOWING ADDITIONAL COMMENTS.

CONCERNS OF HELICOPTER STRESSING WILDLIFE APPEAR UNFOUNDED TO ME. WILDLIFE IS STRESSED BY PREDATORS AND HARASSMENT. THE PROPOSED TOURS DO NEITHER. ONCE WILDLIFE BECOME ACCUSTOMED TO HELICOPTERS ETC., THEY BASICALLY IGNORE THEM. THE STRESS ARGUMENT IS JUST A SMOKE SCREEN TO JUSTIFY REDUCING FLIGHTS.

26.1

NOISE DISTURBANCE TO GROUND-BASED RECREATION USERS IS A FACT OF LIFE WHEN ONE IS NEAR AN URBAN AREA, SUCH AS JUNEAU. THE FREQUENCY OF OTHER AIRCRAFT TRANSITING THE JUNEAU AREA WOULD LEAD TO MINIMAL REDUCTION IN SUCH YOISE "AT THE EYERNSE OF ONLY THE HELICOPTER OPERATORS. OVER THE LAST FIFTEEN YEARS I HAVE SPENT A GREAT DEAL OF TIME WAITING FOR PLANES ON THE BEACH OF BERNERS BAY. DURING THE SUMMER MONTHS SMALL PLANES CAN BE HEARD ALMOST CONSTANTLY AS THEY FLY BETWEEN JUNEAU AND HAINES AND SKAGWAY. ALSO AT LEAST THREE TIMES A DAY LARGE LETS TRANSIT THE ICE FIELD ON A EASTWEST ROUTE AND ALTHOUGH THEY ARE AT A HIGH ALTITUDE THEY CAN STILL BE HEARD CLEARLY.

26.2

FINALLY I AM CONCERNED THAT THESE HELICOPTER RESTRICTIONS WILL IMPEDE THE OPPORTUNITY FOR MINERAL PROSPECTING IN THE JUNEAU GOLD BELT WHICH RUNS THROUGH THE AREA UNDER CONSIDERATION. AT THE GRASS-ROOTS LEVEL OF PROSPECTING ONE CANNOT TELL WHERE THEY WILL BE LOOKING NEXT IN AN AREA AND IT IS VIRTUALLY IMPOSSIBLE TO DETERMINE FLIGHT PATHS AND LANDING SITES IN ADVANCE. ARE PROSPECTOR LANDINGS GOING TO COUNT AGAINST A COMPANY'S TOTAL LANDINGS IN THE ICE FIELD AREA? IF SO I AM OBVIOUSLY ADAMANTLY AGAINST ANY SUCH RESTRICTIONS.

26.3

SHICERELY WOURS

26.1

Potential effects of helicopters on wildlife are discussed in Chapter 4, Issue 3, of the DRIS.

26.2

Thank you for your comment.

26.3

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed. Any point to point landings would not require a special use permit.

|                             | ALASKA                     | CHAMBED                 | OF COMMERCE     |                        |  |                                 |   |
|-----------------------------|----------------------------|-------------------------|-----------------|------------------------|--|---------------------------------|---|
| (907) 586-2323 FAX 463-5515 | JAN 18 33 Regional Office: | Anchorage, Alaska 99501 | D'STRICT HANGER | T / M January 13, 1995 | Kenneth E. Mitchell. District Ranger & W | Juneau Ranger District District | 8465 Old Dairy Road HOVE PANHIER THOUSEN AK 90801 |

Dear Mr. Mitchell:

8465 Old Dairy Road Juneau, AK 99801 This letter is in response to the Draft Environmental Impact Statement your office is conducting regarding Juneau Icefield helicopter tours. We support the increase of helicopter tours as proposed in Alternative B. Helicopter landings are maximum extent possible unless negative environmental consequences to the Icefield become an important form of access by the public to the glaciers and should be permitted to the

27.1

should not require a special use permit. If implemented, the Juneau Icefield will be the only area under a special use permit. Charter operations providing transportation to National Forest Lands National Forests, unlike National Wilderness Areas, are for multiple-use by the public. We are opposed to limiting the hours of access to the Icefield. We also oppose the proposed mitigation measure to eliminate any point to point charters in the Juneau Icefield that are not authorized unprecedented proposed action, which could then serve as a precedent in future decisions in the Tongass National Forest with such a restriction. There is no justification for this regarding use of the National Forest. 27.2

government and the taxpayer needless expense, and successful businesses pay more taxes to keep Opportunities for recreational and educational experiences abound in visits to the Juneau Icefield. provide public access to these areas. The partnership between government and business in such the government going. The third, and most important winner in this scenario, is the public who is provided the opportunity to experience the beauty and wonders of our National Forest lands. ventures as these is a win-win situation. Private enterprise can provide services that spare the The National Forest system needs to take advantage of the availability of private industry to

27.1

Thank you for your comment.

transport of passengers without a special use permit (DBIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

RANGER DISTRICT JUNEAL

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January 14, 1995

Auke Bay, AK 99821 Kenneth A. Smith P.O. Box 210973

L STRICT FAINGE: 1/11/1 CEPUTY RANGER

Juneau Ranger District 8465 Old Dairy Road Kenneth E. Mitchell

PEC / LANDS FRW 2

Dear Mr. Mitchell: Juneau, AK 99801

Thank you for the opportunity to review and comment on the Helicopter Glacier Tours Draft EIS. It is obvious that the Forest Service has spent time and effort to produce options geared toward addressing the problems associated with helicopter tours in the Juneau area. I feel that I will be greatly affected by any alternative as I hike all the trails and live about two blocks from the airport.

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I am opposed to any helicopter traffic in the Herbert River, and especially the Eagle River valleys. I have come to expect traffic in the Mendenhall Valley and Heintzleman ridge area and for the most part can put up with it at the current levels.

## Aiternative A - No Action

I like alternative A but know it's not realistic. In a perfect world I would like to go hiking or sit at home without the sounds of helicopters, however, I know that will never happen.

## Alternative B - Proposed Action

I feel this alternative authorizes too many landings in the entire area. I cannot support a plan that increases activity in the Eagle Glacier area.

# Aiternative C - Authorize Current Level

I can live with this alternative. I strongly support the idea of no landings authorized in the Eagle River area and no increase in the overall number of authorized landings.

# Alternative D - Authorize Mid Level ...

I feel this alternative authorizes too many landings in the entire area. Again, I do not support any plan which would increase activity in the Eagle Glacier area.

28.1

Thank you for your comment.

28.1

## Alternative E - Satellite Hellport

the expense, timing problems and logistics of bussing tourist 25 miles to a satellite heliport. I area and also increases activity in the Eagle River, Herbert River and Windfall Lake areas. In feel this alternative would cause traffic problems on the Glacier Highway with the increase in I strongly oppose this alternative. This alternative authorizes too many landings in the entire addition, I'm sure the helicopter companies would strongly oppose this plan when faced with helicopters. Moving helicopter noise and traffic congestion to mile 25 is not the solution. I bus trips. I know that for myself, I often go out the road to get away from the noise and hassle of the valley. As the draft EIS points out, the valley is noisy with or without hope this alternative is under no serious consideration.

# Alternative F - 1994 level with limited ...

28.1 | I can support this plan. I support the restriction of activity in the Eagle Glacier area. I support the move from seven to six days per week. I support the reduction in hours of authorized landings. I support that there is no increase in authorized landings.

## In Summary

- A Most agreeable, but know it's not possible
  - B Strongly oppose
- C Somewhat agreeable
- D Oppose E Strongly strongly oppose
  - F Agrecable

Just a few thoughts.

increase in authorized landings. For them, it's a profit margin. For me, it's where and how I protecting wildlife and reducing annoyance levels for residents and ground-based recreation live. In my opinion, there is no way to increase the number of authorized landings while The helicopter companies are not going to go out of business if they are not granted an users. I feel it is time to say that our current level of activity is the limit. How many landings do we ultimately want? 22,000? 25,000? 30,000?

number of flights, just the number of landings. While that is true, don't sell yourselves short. The lore of landing and standing on a glacier is a strong selling point for the helicopter tours those of fixed wing aircraft. I think you would find that helicopters are stealing the show. I in this area. If helicopters were not allowed to land on the glaciers, the tours would lose a certain attraction. It would be interesting to compare the popularity of helicopter tours to The draft EIS makes frequent mention of the fact that the USFS has no control over the

28.2

28.2

- 28.2 | feel that you can make a certain correlation between authorized landings and overall helicopter traffic in the specified areas.
- 28.3 I am interested to know more about the helicopter companies attempt to obtain quieter aircraft. Has any thought been given to providing some sort of incentive for such action?

Again, thank you for the opportunity to comment on the draft EIS. Please keep me informed as to your decision.

Sincerely,

Lin hist

Ken Smith

28.3

As new helicopters are developed and utilized, the effects will be analyzed to determine if number of landings should be changed.

To: Ken Mitchell, District Ranger Re: Helicopter Glacier Tours DEIS Prom: Cliff Lobaugh Date: 1-15-95

The helicopter access impact on the Tongass National Forest has been a difficult and confusing subject for the public to comment on and develope a response. The major problem is that there are three different proposals on helicopter access before public for review. There has been local news media coverage on the subject and much interest from the public but there has been no differential between these three seperate proposals. It would have been less confusing if the public could have responded to all proposals at one time and the efforts of the planning teams combined. The issues are basically similarialtitudes, flight patterns, impact on wildlife, impact on people, noise pollution, number and length of permits, Wilderness Act, ANILCA, and the ewnforcement of local/federal laws.

29.1

In reviewing the DEIS Helicopter Tours, the following observations were made:

· 1-The problems that have developed in other public recreation areas and Parks suggests the permits be evaluated yearly with no years commitment in the rapidly expanding tourism field.

2-The helicopter tours must follow the guidlines of the

29.3

29.4

Wilderness Act and ANILCA if these lands are to be affected. 3-A users fee should be considered in the proposal for the million dollar industry. This fee could be dedicated to recreational planning and developement.

4-Laws are not adequately enforced at the present time and I challenge your assumption that there is no predicted irreversible commitment of resources. If the USFS feels these proposals will not cause wildlife problems just interview the two legged animals of Juneau that are presently complaining about the MASH/VIETNAM WAR enviroment the helicopter tours are creating in this urban area. 29.5

I am sure you realize that a study commissioned by Congress in 1987 on impacts of air traffic over National Parks. The report stated the No. 1 problem that faced resource managers in the Park was aircraft noise. It has been stated the noise pollution from the air leaves a bigger footprint than individual hikers on the The Tongass National Forest does not want to become controlled hundreds of people out of work. Looking at the 51 years of experience of this planning team I know you have heard this before. Both Interior Secretary Bruce Babbitt and Transportation Secretary Frederico Pena have been studying options to limit air tours over by the heli-tourism industry like it has been by the timber industry. Hawaii helicopter operators have thus far been able to fend off new regulations by arguing their livelihoods depend on unfettered access to the air. The helicoopter operators contend that regulating the air tours would cripple the industry and put National Parks.

First Form requires a discussion or cumulative effects for ressonably foreseeable actions, there is no requirement to combine separate actions into one decision document. While the purpose and need of the various proposals have the similar vein of helicopters, we chose to and to include all projects in one document would make the formulation cannot be identified and any discussion would be speculative. As NEPA made. For the other helicopter proposals, no decision has been made evaluate them in separate documents because the issues are different complicated. The CEG regulations in 1502.1 state that "(s)tatements nor have alternatives been formulated. Therefore, the consequences activity for which a proposal is on file but no decision has been effects of past and present approved operations will be analyzed. documents for helicopter proposals are prepared, the cumulative shall be concise, clear, and to the point." Cumulative effects consider all permitted activities and identify potential future of alternatives not manageable and the document unnecessarily

The Cumulative Effects section in Chapter 4 of the FEIS has been expanded to include new information that was received since publication of the DEIS.

Because of the length of time required to complete an EIS, desire of applicants to commit to future use, five years permits are proposed. the Forest Service to be responsive to applicants, and the need of

There are no designated wilderness areas affected by any alternatives.

authority of the Organic Act (June 4, 1897). The current national fee schedule can be found in the Forest Service Handbook (FSHB 2720) and Iwenty-five percent of the funds collected are returned to the State fees are collected and determined by the Forest Service under the is approximately 3 percent of a company's gross revenue per year. of Alaska for distribution to municipalities.

study of noise impacts of helicopters traveling to the Juneau Icefield In Chapter 4 of the DEIS (Introduction, Effects Common to All Issues concluded that the overall noise impact of helicopters, as gauged by (USDA Forest Service, 1994a) indicated that the overall impact of helicopter noise is not high enough, nor of long enough duration to described in Chapter 4, Issue 1, of the DEIS, this noise study also and Alternatives: Flight Path and Noise) the only known scientific pose a threat to hearing safety for either humans or animals. As an increase on an annoyance-percentage graph, is low.

This study includes: regulations of tours, limiting weather conditions, and altitudes at which tours can be flown. Helitours are neccessary for certain user groups but must be taken in perpective. Helitours are more carnival rides, whose survival is not dependent on the natural environment. The thrill seekers in this user group could be just as happy navigating the canyons of Manhattan as the Grand Canyon National Park. Helicopter joy rides in paradise will eventually become less attractive as tourists learn of the environmental havoc they can

wreak.

The DANGER lies in the industries proposal to establish helitours and helihiking in Wilderness Area. This illegal proposal, defying two Federal laws should never have progressed past the scoping process. This action establishes mistrust in the public planning process and the lack of concern of the industry for the environment.

29.6

I favor helitours but they must be regulated. The USFS. Helitourism industry, and the public have a challenge before them to develop a sustainable industry that will not degrade the enviroment and dominate the forests.Legitimate and innovative proposals such as Helicopter Glacier tours are exciting and

ing boundy. challenging.

Cliff Lobaugh 3340 Pritz Cove Rd. Juneau, Ak 99801

RANGER DISTRICT

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pe: Lice Irambly

hiking tours are not within the scope of this decision. Helicopter hiking tours are discussed in the Chapter 4, Cumulative Effects, of Helicopter landings in designated wilderness areas and helicopter

the DEIS.

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4 don't like Choppine gring

SALY TO BRIBE PO BOX 6 PELICAN AK 9932.0006

JUNEAU PANGEH DISTRICT

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30.1

Disturbance of helicopter landing tours to ground based recreation users is a significant issue in this analysis and is analyzed in Chapter 4, Issue 2, of the DEIS.

30.1

# COMMENTS: DEIS Helicopter Glacier Tours

DATE: 1-16-95

Mr. Kenneth E. Mitchell,

I would like to state for the record that I support alternative B of the DEIS for more glacier landings in the future. 31.1

listed on page 2-11, section I MITIGATION, paragraph 1., to be onerous to the public it should serve, to the companies it intends to regulate, and to the Forest Service to enforce. I do not believe that any of the nine reasons listed in 36 CFR, chapter 11, Subpart C, Subparagraph 261.70 (a) is just cause to mandate this special use permit. Please eliminate to-point trips to the Juneau Icefield that are not required now. I believe that the guideline One aspect of the DEIS I find distressing is the call for special use permits on any pointthis provision from your ruling.

kind of regulation were to spread to other aspects of the Tongass Forest, my job would be I have been employed as a commercial pilot in southeast Alaska for over 10 years. If this Service cabin on Distin Lake for instance or to take loggers to a remote camp site, much This concentrates too much power in the Federal Government to exert control of citizen of the spontaneous charter work we do would be eliminated for lack of federal permits. adversely affected. If it becomes necessary to get a special use permit to go to a Forest movement on public land.

31.2

Sincerely,

PANGER DISTRICT JUNEAU

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- ..... in........ MOVO PLANNER

31.1

Thank you for your comment.

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

> P.O. Box 32517 Russell Shaub

Kunell

Juneau, AK. 99803 (907) 789-4825

# COMMENTS ON JRD DRAFT HELICOPTER TOURS EIS

ALTERNATIVE E WITH NO INCREASE IN FLIGHTS IS THE ONLY ACCEPTABLE ALTERNATIVE.

THERE ARE ALREADY FAR TOO MANY HELICOPTERS FILLING THE SKIES OVER JUNEAU

AND APPROVING THE REQUEST FOR INCREASES WILL RESULT IN APPROXIMATELY 44,000

ONE-WAY HELICOPTER FLIGHTS PER SUMMER OR BETWEEN 300 AND 400 PER DAY.

THE NOISE AND VISUAL IMPACT OF SO MANY FLIGHTS WILL SIGNIFICANTLY ALTER
JUNEAU'S AND THE SURROUNDING NF'S environment.

2.1

SPECIFIC COMMENTS:

YOUR NOISE IMPACT STUDY WAS FLAWED. IT ADDRESSED PEAK NOISE LEVELS ONLY
ANG IGNORED THE PROBLEMS OF FREQUENCY AND DURATION. A FLIGHT OF FIVE
HELICOPTERS STRETCHES OUT FOR WHAT MUST BE CLOSE TO A MILE AND CONSIDERABLE
TIME PASSES BETWEEN THE FIRST NOISE OF THE LEAD HELICOPTER AND THE
DISAPEARING NOISE OF THE LAST ONE. ALSO, YOU CANNOT ASSUME THAT SOMEONE
WHO HEARS A JET TAKE OFF OR LAND ONCE OR TWICE AN HOUR WILL NOT BE IMPACTED
BY 20 OR 30 (5 RETURNS AND DEPARTURES EVERY 25 MINUTES) HELICOPTERS PER
HOUR. OMLY CONTINUOUS BACKGROUND NOISE GREATER THAN THE HELICOPTERS WOULD
NEGATE THEIR NOISE.

THE USE OF DECIBEL SOUND LEVELS AND LABORATORY ANALYSIS DOESN'T CAPTURE
THE TRUE IMPACT OF THE NOISE. THEY WON'T DAMAGE YOUR HEARING LIKE A CHAIN
SAW BUT THEY ARE LOUD ENOUGH SO THAT YOU CAN'T CARRY ON A CONVERSATION
WHILE THEY ARE IN YOUR VICENITY. I LIVE ON AUKE BAY AND ON ONE OCCASION
DURING THE SUMMER OF 94 MY OUT-OF-TOWN GUESTS AND I HAD TO MOVE INSIDE
BECAUSE WE COULDN'T HEAR EACH OTHER OVER THE HELICOPTER NOISE OUT ON MY

THE WORK DONE BY THE VISITING FOREST SERVICE SCIENTIST FROM CALIFORNIA
MAS LESS THAN BRILLIANT. STUDIES HAVE SHOWN THAT ELEVATED SOUND LEVELS
CAUSE STRESS AND FATIGUE EVEN IF THEY DON'T DAMAGE YOUR HEARING. STRESS
AND FATIGUE CAN OF COURSE CAUSE ALL SORTS OF ILLNESSES. SINCE THIS SCIENTIST
IS NOW RETIRED, I SUGGEST THAT YOU HAVE A HELICOPTER FLY OVER HIS HOUSE
AT THE RATE OF 20 OR 30 TIMES AN HOUR FOR AN ENTIRE SUMMER AND SEE WHETHER
HE AND HIS NEIGHBORS CONSIDER IT A PROBLEM.

VISUAL IMPACT WOULD BE A PROBLEM EVEN IF THE HELICOPTERS WERE COMPLETELY

SILENT. WHILE AN OCCASIONAL FLOAT PLANE OR HELICOPTER CONTRIBUTES TO THE
OVERALL MYSTIQUE OF ALASKA, LOOKING AT 40 OR 50 THOUSAND OF THEM WILL DESTROY

32.1

Thank you for your comment.

32.2

Alaska sound study was done by specialists in noise analysis from the This is the only noise study that has been completed for scientific study available for this analysis. In the noise study it is recognized that "Community noise is a complex and often emotional authorities agree that, with respect to hearing health and annoyance proportional to the total sound energy received."(USFS, June, 1994). helicopter tours to the Juneau Icefield and, therefore, is the only helicopter activities in the areas of interest." (USFS, June, 1994). Chapters 3 and 4 includes additional discussion and clarification of (at least to a first approximation), the human response to sound is The DEIS and comments received on the DEIS that addressed the sound issue with many physical and psychological variables." (USFS, June, study: "An attempt was made to take measurements during extensive To account for this, the noise study states that: "Most The June 1994 Alaska Helicopter Tours Sound Measurementer Juneau, Peak noise levels were measured as much as possible in this noise Forest Service Technology and Development Program in San Dimas, study, were reviewed by specialists at San Dimas. The FEIS in

32.3

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IN SUMMARY, THE LARGE NUMBER OF HELÎCOPTERS ALREADY FLYING OVER JUNEAU
IS AN UNBEARABLE PROBLEM FOR THOSE WHO HAVE TO LISTEN TO THEM AND SEE THEM
CONSTANTLY AND INCREASING THE NUMBERS IS OUT OF THE QUESTION. MOVING THE
HELIPORTS TO THE EAGLE BEACH AREA WOULD LESSEN THE PROBLEM FOR RESIDENTS
BUT WOULD CONTINUE TO IMPACT HIKERS AND WILDLIFE IN THAT AREA SO THE NUMBERS
SHOULD NOT BE INCREASED.

Frank C. Arnold 2900 Fritz Core Kd Juneau AK

9060-686-606

JUNEAU RANGER DISTRICT

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## ALASKA BOUND

Cruise and Tour Specialists

Phone: 810-548-2420 • Fax: 810-548-3504 • Toll Free: 1-800-ALASKAPANGEF DISTRICT JUNEAU 23906 N. Woodward Ave. at 1-696, Pleasant Ridge, MI 48069

23, 20, 35

Jan. 17, 1995

Mr. Ken Mitchell District Ranger uncau AK

Dear Mr Mitchells

DISTRICT PARKERS DEPUTY PANGER 19VC PLANNER REC / LANDS Liverineen FAW ا ح

fishing, I can unequivocally say that our clients' most-mentioned highlight of their trip is the juneau Helicopier trip. I am quite dismayed that the possibility exists that these tours may be halted purpose is to help fulfill people's dream of a vacation to Alaska. Although we sell everything from cruises to tours, lodges to I am the owner of a travel agency in Michigan whose main or ilmited.

beauty, but some of these clients have told me it's the highlight of person who normally doesn't participate in active" tours, can feel the excitement like everyone else and can walk on the glacier. It's never noticed the silghtest impact left on the glacier by landing. viewed from the hellcopter, are beyond belief. Even the elderly their life! The ERA pilots are excellent tour guides, and I have To the typical ellent from here in the Midwest, the glaciers, as probably hard for you to imagine, being surrounded by such

33.1

wish you could see the look in their eyes when they come back and emphasize that the main reason for my appeal is for my cilents; 1 can only give you the impact on my business. 4 % of our revenue came from selling helicopter tours last year, and that should To deny people this peak experience that harms no one, would certainly be a shame. But there are economic impacts as well. I double this year. In a low margin business such as the travel business, it would hart to lose that amount. But I want to tell me about their tripl

33.2

I hope a little voice from the Midwest helps the cause.

Patty L Crichton - Owner

33.1

Thank you for your comment

33.2

Meeting between commercial guided recreation opportunities and non-commercial, non-guided recreation opportunities while minimizing impacts to people and resources. All alternatives, except the no action alternative, must meet the purpose and need while addressing significant issues. this demand provides for visitor safety and an appropriate balance The Purpose and Need in Chapter 1 of the DRIS is to meet current helicopter access to remote locations on the Juneau Icefield. public demand for quality guided services which provide safe



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January 17, 1995

Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801 Kenneth Mitchell District Ranger

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end of a vacation trip this year. The people not only tour and shop locally, but also use restaurant, hotel and passengers there. Our marketing figures predict over 10,000 guests will pass through Juneau at the start or Juneau is the hub of our Alaska vessel operations, with 5 of our 6 vessels embarking and disembarking airport services. We employ over 10 staff locally in Juneau to serve our guests.

glacier tours around Juneau with great interest, and would like to comment on the options offered in the Draft Environmental Impact Statement. Local tours are an important part of the vacation experience for our guests, touring is that guests may visit a wildemess area that they otherwise would not have the physical ability, time, equipment or know how to reach. In addition, our passenger feedback surveys show the flightseeing tours to and a wide array of excursion opportunities greatly enhances that experience. The advantage of helicopter We here at Alaska Sightseeing / Cruise West have been following the debate over permits for helicopter be the most popular in terms of passenger satisfaction.

Regarding impact, Alaska Sightseeing is an environmentally sensitive company, and we believe helicopters, which require no roads, trails, shelters, rest rooms, etc. to be one of the least intrusive means to access a remote area. In addition, the reports we have seen indicate that the noise produced by the flights has no discemable effect on the wildlife or the residents of Juneau.

34.1

We encourage you to adopt the measures outlined in your "Altemative B," that is to allow local helicopter operators increased landings on the Juneau Icefield. This would serve our guests best, and the negative impact, as far as we can see, is nothing. Thank you for the opportunity to comment. If you have any questions regarding our position, please feel free to contact me here in Seattle at (206)441-8687.



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January 17, 1995

Kenneth E. Mitchell District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

Dear Kenneth:

This letter is in response to the Helicopter Glacier Tour Draft Environmental Impact Statement. I have lived in Juneau for 35 years and have hiked all the trails mentioned, some many times at all times of the year. I have also flow no several helicopter tours with Temsco and ERA. It is a very unique way to tour otherwise inaccessible, beautiful country. Each trip has been memorable for me. My residence is in West Juneau, where in the summer we have floatplane noise, cruise ship noise, ERA helicopter noise, not to mention car traffic noise. I accept this as Juneau in the summer. When I wish to escape this urban environment I usually head out the road to enjoy the peace and solitude of the many area trails. If I'm looking for an exercise hike after work I'll hike the Mendenhall Glacier trails knowing there will be noise. It's still beautiful country and the aircraft operators are as discrete as they can be. On weekends I usually head farther out the road to use any one of the trails listed in Alternative E to find peace and quiet.

After reading through the HGTDEIS I have these comments.

| First, in Chapter 2, there is added confusion in the way the headings are written, example, B. Alternative A, C. Alternative B, etc., it even looks confusing when I write it. It seems that a better format could be used.

Second, in Juneau we have a finite amount of recreation space.

Over the years with increased population and with increased tourism that space to me seems to be shrinking. (F. Alternative E) A satellite heliport in the Herbert River/Eagle River area would definitely make that recreation space shrink more and I believe would have a detrimental impact on the area. Not only increased helicopter noise but also more traffic on the highway. I vote against this alternative.

Third, at some point quality of life needs to be considered over the demands of the outside world. At what point do limits need to be put in place to maintain a quality experience for all? I believe that we in Juneau are reaching that point. (C. Alternative B) seems to be exceeding the limits by 1999. I would vote against this alternative. (E. Alternative D) seems to me to admit that there needs to be limits and is still being very

35.1

Thank you for your comment.

.5

The headings have been changed for clarity.

35.3

Thank you for your comment.

35.4

generous to the helicopter companies. Even at current levels I haven't heard of any financial problems in the helicopter company 35.4

In the interests of preserving a quality hometown, wilderness atmosphere (G. Alternative F) is my choice of the alternatives. It gives the residents of Juneau not to mention the bears, deer, goats, eagles and the many other furry and feathered friends that are to numerous to mention, the most helicopter noise free time of any of the alternatives. It also gives the tourist that can't get a seat on a helicopter a reason to come back. 35.5

Thank you to those people that have put time and energy into this work., I know that its not easy. Good luck in your decision making process.

Sincerely:

Kevin J. Smith P.O. Box 240648 Douglas, AK 99824

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

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Dear Mr. Mitchell,

I'm writing to comment on the Helicopter Glacier Tours DEIS.

I cannot support any of the proposed alternatives because all of them contain a closure order prohibiting "point-to-point" helicopter landings without a special use permit.

Such a closure order would effectively block heli-access by many current locals users: skiers on Mounts McGuinness, Roberts, Hawthorne and other area peaks, parasailers and hikers on Thunder Mountain, climbers getting shuttled to the base of the Mendenhall Towers, etc.

The DEIS doesn't clarify whether the closure order would apply year-round or just to the May 15 to September 15 "tourist season." It doesn't mention if there's a fee for special use permits, whether individuals can get them or how long it takes to get a permit. Setting a date in advance based on a guess of what future weather and avalanche conditions will be on that date is a recipe for disaster.

If I understand the proposals correctly, each helicopter company will be limited to a fixed number of landings in the "Map A" area each year. Since summer tourist runs to the glaciers are more profitable than typical point-to-point runs the helicopter companies will give them priority. Local users will be squeezed out by cruise ship passengers. Reducing access for local users conflicts with the Forest Service goals stated in DEIS section 1-6 -- to "provide a broad spectrum of recreation opportunities," to "give priority consideration to recreation opportunities now being actively utilized" and "to encourage dispersed recreational use."

I suspect that over 95 percent of the helicopter flights in the Map A area occur during the summer. As a skier and snowboarder my main concern is keeping helicopter access open in the winter and spring (when impacts on wildlife and trail users are nil). The current system (no permits for point-to-point flights) allows flexibility, access to numerous sites and lets users schedule flights based on current weather conditions. Forest Service studies cited in the DEIS state the impact of helicopter landings in the

36

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

36.1

icefields is negligible. So why impose restrictions when no problem exists?

Please delete special use permits for point-to-point flights from your final plan.

Sincerely,

John J. Erben, Juneau, AK

c.c: Senator Ted Stevens
Senator Frank Murkowski
Rep. Don Young
State Rep. Caren Robinson
State Rep. Kim Elton
Juneau Mayor Byron Mallot
Juneau City Manager Mark Palesh
Governor Tony Knowles

January 17, 1995

8465 Old Dairy Road **US Forest Service** Juneau AK 99801 RE: Increase in Helicopter Traffic

To Whom It May Concern:

making money off the tourists but when our quality of life is starting to become degraded because calls for them to fly up Chicken ridges to minimize noise, but nine times out of ten they fly down the west side of Chicken ridge and make their landing approach right over our houses. It sounds someone wants to make even more money I think the Forest Service should step in and look out times an hour. During the peak the helicopters are flying every hour. I am not against someone over, I cannot even here the lawn mower!! Another difference is that I do not mow my lawn 20 traffic. The current noise in the summer from helicopters is already too much. Their flight plan for the best interest of the public. You would not like it if someone flew over your house every hour from April - September. The residents of the Valley do not like it either. Please do not let As a resident who lives in the Aurora Court subdivision I am against any increase in helicopter like the beginning of Apocalypse Now. The person who did the sound study and said that the noise level was the same as a lawn mower is crazy. When I am mowing my lawn and they fly them increase the flights from their current level.

RANGER DISTRICT JUNEAU

JAN 18 35

C'STRICT RANGER DEPUTY RANGER PEC / LANDS PACVO PA NINER Library -7

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Please refer to response 32.2

37.1

Shane Herron 2208 Ranen Rd. Apt. D Douglas, AK 99824

JUNEAU RANGER DISTRICT

36. ZI NY

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

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This is an approvel request as outlined in Alterative B from your draft statement.

Tourism is a large part of Juneau an helicopters seem to be the best choice for our visistors to enjoy the ice fields in the National Forest.

However, some problems do exist. Noise impact seems to
be a problem and having the helicopters stay with their passengers on the ice would reduce the number of flights, thus
decreasing noise. The main problem with shutting down the
(A-Star) type helicopter, is the amount of jet fuel dumped
on the ground when the engine is shut down. I see a need for
a fuel catch system that leaves less impact.

18.2 In concerned about the landings around the Twin Glacier Lake. There seems to be a number of either nesting or feeding birds by the stream to the left side of the West Twin Glacier. Also the low flight path over Swedepoint seems to close to the Steller Sea Eagle.

Your consideration on these matters is apprecited.

Sincerely,

Mun. Shane S. Herron

38.1

The helicopter glacier tour operators drop off passengers on the Icefield, and pick up the people that were dropped off on the previous flight. This is more efficient for them and results in the same number of flights. The permit will be modified to address your comment regarding fuel dumping.

38.2

No

Thank you for your comments. We will try to secure more information on waterfowl occurrence in the Twin Glacier Lake area from the U.S. Fish and Wildlife Service. We have observed that in situations where regular flight paths are followed and distance from wildlife of at least 1000' are maintained, wildlife move from the flight path or habituate to the activity. Helicopter pilots who fly glacier tours for local companies are expected to follow flight paths (weather dependent). They are also expected to maintain 1000' distances from wildlife and avoid circling or pursuing wildlife. The Forest Service can recommend these measures as mitigation under the terms of the permit which is issued and require helicopter companies and pilots to act in a professional manner and avoid unnecessarily disturbing

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#### 39.1

Two sites measured in the June 1994 Noise Study are located in the vicinity of Fred Myers. These sites are shown on Map 9 and described in Chapter 3, Acoustical Environment. The noise in this area was measured and included in the study. For a copy of the noise study, contact John Favro at 586-8800.

### 39.2

Please refer to Response 32.2.

Agr me "highly annoyd" A rice 1990.

Livered Collection Col

39.3

Impact to local residents is a significant issue as described in Chapter 1 and analyzed in Chapter 4 of the DEIS.

39.4

Impact to local residents is a significant issue that was analyzed in Chapter 4, Issue 1, the DEIS.

39.5

DISTRICT RANGER 1-1 8465 OLD DART RUAD JUNEAN AN 79801

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PS ONE EVENT Sam Cupy TWO MINUTES 2194 CASCADE ST ALL SUMMAN JINVER AK 99601 LOW 6 !! (907) 785-3485

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FAA controls flight paths and elevations. Your comments have been forwarded to them.

40.1

JAN 18 '95

C'STRICT RANGER

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F.E. EUR 210003 Fuke Bay, AK 99821 January 15, 1345

> Ken Mitchelling District Ranger USFS Juneau Ranger District 8455 01d Dair, Road Juneau, Hisska 77801

De,ar Ken:

This is in response to the helicopter glacier tour E.I.S.

We note for no increase in helicopter tours over the 1994 levels. This industry simply causes too much impact on the quality of life for Hendenhall Vailey and Auke Lake area residents. Further, because noise problems occur when fight conditions are poor-helicopters should stay on the ground if they can't clear residential areas by at least 2000' elevation.

41.1

Thanks for the opportunity for comment.

mile Berly Asing Beshow

Mike and Astrid Bethers

41.1

FAA controls flight paths and elevations. Your comments have been forwarded to them.

## COMMERCIAL HELICOPTER OPERATIONS PUBLIC COMMENT

Juneau Ranger District US Forest Service Juneau, Alaska Ladies and Gentlemen:

operations in the Juneau area of the Tongass National Forest. This letter is in support of increased commercial helicopter

invaluable, and often lifesaving assistance when people "go missing" As Team Manager of the SEADOGS Search and Rescue Team, I have provided "eyes in the sky" to help us locate lost hikers, or to tell us where they are NOT located. Often they provide this assistance in this area. Since some of their regularly scheduled flight paths follow popular trails and recreation areas, TEMSCO has often knowledge of the local area has made them first responders in almost every SAR mission which is slyable. Their slying abilities personal knowledge of the value of civilian helicopter operators without charge as part of their normal flight operations. Their during search and rescue emergencies. TEMSCO has provided have saved countless lives from Ketchikan to Yakutat.

The sound of their aircraft is one of the most comforting parts of life Their presence is a benefit to Juneau's economy and to its safety. in southeast.

Bowler L. Bruce Bowler PO Box 32719

Juneau, Alaska 99803

42.1

Thank you for your comment.

42.1

## PUBLIC COMMENT COMMERCIAL HELICOPTER OPERATIONS

TO: US Forest Service

Juneau Ranger District Juneau, Alaska Ladies and Gentlemen:

This letter is in support of increased commercial helicopter operations in the Juneau area of the Tongass National Forest.

As CISD manager, and member of the SEADOGS Search and Rescue Team, I have personal knowledge of the value of civilian helicopter operators during search and rescue emergencies. TEMSCO has provided invaluable, and often lifesaving assistance when people "go missing" in this area. Since some of their regularly scheduled flight paths follow popular trails and recreation areas, TEMSCO has often provided "eyes in the sky" to help us locate lost hikers, or to tell us where they are NOT located. Often they provide this assistance without charge as part of their normal flight operations. Their knowledge of the local area has made them first responders in almost every SAR mission which is flyable. Their flying abilities have saved countless lives from Ketchikan to Yakutat.

Their presence is a benefit to Juneau's economy and to its safety. The sound of their aircraft is one of the most comforting parts of life

in southeast

Ludy Boarter PO Box 32719

Juneau, Alaska 99803 1/10/5 YE

43.1

# Alaska State Legislature

Serain Majority Leader Obstr. Judiciary Committee Net Chetr. Community & Regional Affairs

Committee on Committees Western States Legislative Forestry Task Force Legislative Council Member. State Attains Committee



332 Front Street Ketchikan: Alaska 99901 1907) 223-9088 Fax: 1907) 223-0713 State Capitol Juneau. Alaska 99801-1182 (907) 465-3873 Fax: (907) 465-3922

January 18, 1995

Senator Robin L. Taylor

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, Alaska 99801

Dear Mr. Mitchell:

I am writing to ask that the special use permits for point-to-point flights be eliminated from the final plan for the Juneau Icefleid. This closure would be harmful to prospectors, hikers, parasallers, climbers, heli-skiers, and naturalists.

44.1

preferred plan would expand access to one commercial user group. The current system of no advanced permits for point-to-point flights is much preferred. It lets flights be scheduled on the basis of current weather conditions. It is interesting to note that all of the proposals would restrict local access but the

I appreclate your consideration of my thoughts on this issue.

Sincerely

(Robin L. Taylor

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

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P.O. BOX 32819 JUNEAU, ALASKA 99803 (907) 789-3100 (Talephore) (907) 789-1013 (Foctimite)

PROFESSIONAL CORPORATION

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DANIEL O BRUCE
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115A M. KIRSCH
JEFRERF F SAUER
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KEVIN J SULIUMAY

January 18, 1995

Mr. Kenneth E. Mitchell, District Ranger Juneau Ranger Station

8465 Old Dairy Road Juneau, Alaska 99801

Re: Helicopter Glacier Tours DEIS

Dear Mr. Mitchell:

It is my understanding that public comments on the pending Helicopter Glacier Tours DEIS ends on January 20th. I would like this letter to be submitted into the record opposing the proposed alternatives listed. I have received a copy of John Erben's letter dated January 17, 1995. I concur with his objections to the proposed DEIS action and the restriction that would be placed on "point-to-point" helicopter landings without a special use permit. While I can appreciate the concern that may exist for summer helicopter trips for tourists, what about those of us who live in Juneau and wish to make helicopter trips into the back country for hiking or helicopter skiing?

45.1

I encourage you to reconsider the proposed alternatives and to allow for point to point access to the glaciers and back country.

Very truly yours,

BAXTER, BRUCE & BRAND

PANGER DISTRICT

**JUNEAU** 

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OFFICES LOCATED AT PROFESSIONAL PLAZA

9309 GLACIER MIGHWAY

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

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C'STRICT FANCER \_\_

January 18, 1995

District Ranger Juneau Ranger District 8465 Old Dairy Rd. Juneau AK 99801 Mr. Ken Mitchell

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The purpose of this letter is to comment on the alternatives in review for point-to-point helicopter charters within the Juneau Icefield. I love the Tongass National Forest and am an avid skier and hiker. I also appreciate helicopters and the accessibility they provide for locals and visitors. Many people complain about helicopter noise, but it seems that in the overall scheme of things, a few minutes of noise is the biggest impact that helicopters make on the area. Not only do helicopters make this area more accessible for people like myself, but also for those who could not otherwise get up to the icefield such as people with handicaps, the young or the elderly. It seems to me that government involvement in regards to permits is excessive and clumsy. Why should people have to obtain special use permits to get to an area via helicopter when there is no other way to get there? Is the traffic to this area really so heavy that a permit is necessary? 46.1

It is a good idea for companies that are operating glacier tours to work under a permit system with the US Forest Service. This is a higher volume situation in small areas, and it is understandable why they need to be regulated. But charters are a different situation. Many people I know who charter wait for favorable weather before they go. If people need to get permits ahead of time this would not be possible.

Also, if the allocations for these permits fall under the constraints already placed on helicopter tour operators, they may be faced with turning away local business in the fall and winter if they use all their allocations during the summer. This is a disservice to the local community and does everything but promote healthy regulated growth in local aviation companies.

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

| Helicopters provide safe, easy, low impact transportation to the National Forests in Alaska. I strongly urge you to reconsider the need for special use permits to travel within the Tongass | National Forest.

Sincerely,

MM PMUKI
Diana Bellotte
Po Box 32103
Juneau AK 99803

Kenneth E. Mitchell

Juneau Ranger District Juneau, Alaska 99801 8465 Old Dairy Road District Ranger

SUBJECT: Helicopter Glacier Tours Draft Environmental Impact Statement | NM | 02

C'STRICT RANCER\_

DEPUTY PANGER

JAN 19 '95

Enclosed are my comments regarding the above captioned subject matters of PANNIER FAW Dear Mr. Mitchell:

There has been no demand from the public for more landings. The demand has come from the tourist industry and the I atrongly object to any increase in helicopter landings at all. helicopter companies.

Listan santi

The increase in low flying over residential areas will greatly increase the chance of an accident occurring. The safety factor of these flights has never been considered.

the ..evietios. Industry knew where and when the testing was to be done and all aircraft of all kinds avoided our subdivision for the 2 days testing was going on. The normal aircraft until the Forest Service equipment was elsewhere, with the exception of Temsco Helicopters. true deily test. On the third day, when the Forest Service tested other areas, all sorts of helicopters and fixed wing craft were doing their usual thing, flying low over our subdid not have permits to land on the glacier, but the quietness of your test was false, as the helicopters which did have a permit to land on glaciers also avoided our subdivision activity flew elsewhere, so the level of noise from fixed wing and helicopters was not a division, saining altitude and losing altitude in a dangerous manner. True, all of these noise is a nightmare for many of the residents. The testing done by the U. S. Forest Service in 1994 from our own property was grossly inaccurate. The equipment shorted out, these helicopters travel in groups of seven (7) each way. The overhead noise and side

Service gives permits for any use of public land (the glacier) they then have the responsibility company would be if the helicopter crashed, but if the person is already walking on glacier and is hurt/killed, will the Forest Service be sued due to the fact that they issued a permit and to see this activity does not adversely effect the public, either their solitude or safety. If a passenger walking on the glacier is injured or killed, who is responsible? The helicopter The Porest Service claims they have no control over flight paths. They should be responsible took a percentage of the tour cost? I don't think enough thought has gone into this entire for getting together with FAA to make sure all gaining and losing of altitude is not over occupied lands, but use the original East-West filght path the jets use. If the Forest permit business.

I also notice Alternative B does not have any "no fly" days at all, or time limits for flights. We have had, in 1994, up to 15 hours a day of 7 helicopters every 20 minutes flying over and/or extrasely close to our house, making outdoor family activities impossible. Their filght path keeps creeping closer and closer. I liken the noise to a large group of Hell's Angels going round and round the subdivision all day. No one would put up with it, including some of the very people advocating increasing these landings.

letter and the "My Turn" column in the January 19, 1995 edition of the specialists who took sound measurements at your house in 1993 and then of the FEIS for a description of San Dimas Technology and Development subsequently retired. Please see Chapter 3, Acoustical Environment, Juneau Empire. We discussed with Eric Schilling and his supervisor The Juneau Ranger District contacted the San Dimas Technology and Development Program to discuss the concerns outlined in both your the points you raised . Mr. Schilling and Rob Harrison were the Program and Mr. Harrison's and Mr. Schilling's qualifications. analyzed the data at the San Dimas center. Mr. Harrison has

garden. One microphone malfunctioned but was replaced and a full set determine the noise Mr. O'Brien would experience while working in his microphones were placed near Mr. O'Brien's garden in his backyard to Mr. Harrison and Mr. Schilling, along with their recording equipment, equipment while taking measurements at Mr. and Mrs. O'Brien's house. readings from one or more microphones, to use during their analysis. microphones set up to take readings. They record from four separate microphones because it is not unusual to have problems with one and that gives them backups, up to four sets of data, in case of faulty were under the carport but cables were run to the sound measurement Mr. Schilling informed us that there was not a problem with faulty problem if the microphones have windscreens, which they did. Four have affected the accuracy of the recordings because they had four of data was recorded. Had it not been replaced it still would not There was a light rain the day they were there but rain is not a recording equipment to be out of the rain but did not affect the accuracy of the measurements being recorded from the microphones equipment, which was in the yard in the open. This allowed the outside in the yard.

Harrison and Mr. Schilling were during the recordings except for sites sound study, the sound specialists did not decide which site they were During the The Forest Service person from Juneau Ranger District who coordinated 11 and 12 and the second day that readings were taken at Mr. and Mrs. O'Brien's house. Sites 11 and 12 were on mountain tops and a Temsco helicopter dropped them off at each site. The first day at Mr. and the sound studies was the only person who knew when and where Mr. Mrs. O'Brien's house, Temsco did not know they were there. going to until the day of the test.

runway near O'Brien's house, such as coming in lower or staying higher The second day of recordings at Mr. and Mrs. O'Brien's house was made experiment to determine if sound levels from the helicopters could be longer. Mr. Engelbrecht was in radio contact with the helicopters to as an experiment. Bob Engelbrecht of Temsco was there to help them cooperated to find out if he could use a certain approach to make a reduced by changing flight elevations during their approach to the navigate them in flying different approaches. Mr. Engelbrecht difference in the noise level over Mr. and Mrs. O'Brien's neighborhood.

The Forest Service is mistsken if they believe the helicopters are now, at 1994 level of filghts, operating from 8:30 a.m. to 9 p.m. The truth is, they fly whenever they have visibility, as early as 7 a.m. and as late as 10.30 p.m. We have experienced this over our own home. No one, including the U. S. Forest Service, is monitoring the number of filghts or number of filghts or number of filghts or the Forest Service itself has told me they do not keep a record of the number of filghts flown, so there could actually be more filghts than permitted. The Forest Service has the responsibility to monitor the number of filghts and the times of starting and ending of the daily filghts. If the Forest Service cannot monitor these filghts, then they

the 1994 level of landings. This number in itself is too great. The noise and safety issues must be addressed more fully before any long range permits are granted, if ever. Permits for S years are out of the question. You have the responsibility to protect the public off Forest Service lands since you are a party to these landings. If there is one crash of any kind, I'm sure all landings will come to a stop, but it will be too late for those hurt or strongly urge you to not allow increased landings and issue a temporary I year permit for should not be issuing permits.

## ALTERNATIVE C:

For all the reasons I gave for Alternative B, 1 object to this one, too. No five year permits should be granted. I request only a 1 year temporary permit be issued if Alternative C is your choice.

dally time restrictions. As it is now, from first light to last light, a total of 15 hours and day has been the rule. And it appears, to me, in order to save fuel and time, these gain, 1 notice no provision for holidays and weekend respite from these flights. Also, no helicopters keep creeping closer to our homes. Again, it is dangerous as well as noisy.

## ALTERNATIVE E:

This option is a lot better as far as flights over occupied areas. It certainly would be 47. Gaafer for residents. There should be a satellite base both North and South of town, with time limits for flights and respite days.

## ALTERNATIVE F:

I will repeat part of my Alternative B response. The Forest Service is mistaken if it 47.7belleves the helicopters are now, at 1994 level of flights, operating from 8:30 a.m. to 9 p.m. 47.8 actually be more flights than permitted The Forest Service has the responsibility to monitor the number of flights and the times of the starting and ending of the dally flights. If the Forest Service cannot do this monitoring, then they should not be issuing permits. itself has told me they do not keep a record of the number of flights flown, so there could The truth. is, they fly whenever they have visibility, as early as 7 a.m. and as late as 10:30 p.m. We have experienced this over our own home. No one, including the U. S. Forest Service, is monitoring the number of flights or the daily times flown. The Forest Service

Thank you for the opportunity to present my views.

Streerely,

Julieau. Alaska 77004

outside the jurisdiction of that agency. In this case, the effects of regulations for implementing NEPA, 40 CFR 1508.25, requires agencies to discuss the effects of connected actions even though they may be This EIS was prepared to disclose the effects of issuing helicopter glacier tour permits on National Forest System lands. The CEQ the helicopter flights are outside the jurisdiction of the Forest Service but we must show the impacts of those flights.

#### 47.3

alternative, not hours of helicopter flights currently occurring. The Action, have hourly restrictions, as shown on Table 2-13 of the DRIS. The hours indicated in the alternatives are hours proposed for each All of the action alternatives, including Alternative B - Proposed Schedules for takeoffs and landings at heliports or duration and location of flights are not within Forest Service jurisdiction. Forest Service is only authorizing landings on the Icefield.

helicopter glacier tour landing proposals, which were for five years, In the interest of government efficiency and to properly analyze the analysis, the Forest Service is required to conduct a new analysis. it was determined to cover a five year period in the analysis. If conditions significantly change during the period addressed in the

#### 47.5

The analysis covers a range of alternatives, and the provisions for holiday and weekend respite and time restrictions are addressed in other alternatives.

#### 47.6

Thank you for your comment.

#### 47.7

were 9:00 am until 6:00 pm. The hours presented are restrictions have suggested. Alternative F does not imply that the use hours for Alternative B in the FEIS has been changed to reflect the hours you that would be required under Alternative F.

#### 47.8

Helicopter use for glacier landings has been and will continue to be recorded on an annual basis.

### JUNEAU RANGER DISTRICT

Fred Hiltner P.O. Box 21994 Cont. 2555 Juneau, Ak. 99802

Kon Mitchell
District Runger
Juncau District
U.S. Fercat Service
8055 Did Palry Rd.
Juncau. Al., 20001

Dear Mr. Mitchell,

ESTRICT FANGER //W/
DEPUTY FANGER //W/
TIN HEC/LANDS
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HC/LAN

I am writing this letter to that concerns I have with what may be new regulations for helicopter access on the Juneau Iceffald. Specifically, my concerns are with requiring special use permits for point to point helicopter charters.

I have chartered helicopters up onto the Juneau Icefield for approximately fifteen years, both professionally as well as for personal use. For eleven years I used helicopter transport as part of a climbing class program that was a collaboration between the University of Alaska Southeast and Alaska Biscovery, a Juneau-based wilderness travel company. This program included basic mountaineering classes, advanced mountaineering, ski basic mountaineering, its climbing, out touring and other idefield related often access the idefield via helicopter on personal trips of often access the idefield via helicopter on personal trips for climbing activities. The Juneau Icefield is a unique and wonderful place, and those of us who live in Juneau are especially fortunate to live to live a class for reasonable access.

One fact of using the iseffeld is that, because of the steepness of geographical relief near Juneau, access up onto the iseffeld is difficult, taking experienced climbers a full day or two to get to a base camp area. Helicopters effectively cut the access time to between six to twenty minutes to a vide variety of landing sites. If the Forest Service makes local helicopter charters difficult or prohibitive because of a company's need to prioritize permits for tourists, this vill severely impact use of the icefield to a growing number of users from the Juneau area.

I encourage you to keep local point to point charters open for local helicopic cumpanies to allow access to those who use the Juneau Icefield for recreational purposes. Access must remain open to those of us who have used it historically and want to continue using it without competing with tourists for permits. Let's not make it hard for Juneau residents to take advantage of the jevel of our area.

Sincerely,

Jed Hilher

48.1

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

DEPUTY RANGER 1995 F'STAICT HUILLH AM BRUCE H. BAKER P.O. Box 211384 Auke Bay, Alaska 99821-1384 (907) 789-9354 rial BRUCE

Fas Mr. Ken Mitchell, District Ranger Juneau Ranger District Juneau, Alaska 99801 U.S. Forest Service 8465 Old Dairy Road

USHING LI CALL

FEC / LANDS

M/L

Dear Ken:

I am writing regarding the Forest Service's environmental impact statement regarding the authorization of commercial helicopter tour landings on the Juneau Icefield.

I request that rather than increase the number of authorized landings on the icefield from the 1995 level, you significantly reduce the number below this level.

One reason is that the noise level is very disturbing to those of us who are traveling by foot (hiking, climbing, or back-country skiing) on the icefield or adjacent mountains and trails, or canceing on Mendenhall Lake. Throughout an otherwise pleasant day in the mountains or out on the lake, one has to put up with the noisy disturbance of repeated helicopter flights. If the helicopter companies are not willing to show more consideration for other residents and visitors who are trying to use the area quietly and unobtrusively, then it's up to you as a representative of the broader public to step in and require them to reduce the disturbance they cause.

49.1

A second reason that landings should be reduced is the potential for wildlife disturbance. If, for example, you've ever hiked the saddle between Heintzleman Ridge and Thunder Mountain, you may know the feeling one has when several helicopters buzz the ridge. They come so close that a person isn't sure if they plan to land where he or she is walking or not. I can't imagine mountain goats resstablishing themselves at that location with that level of repeated aerial disturbance. The more landings that are authorised by the Forest Service, the greater the potential for fly-by harassment of wildlife.

49.2

a level of use that is less than what a special economic interest requests but more than what those negatively affected by the use request. However, such decisions merely extend the half-life of the resource values that are at risk. If you authorize a number of peoples' values. The land manager's easiest option is to decide on the Forest Service to disallow an increase in the degree to which a special economic interest group is allowed to impact other There are situations in which it is sound resource management for

49.3

Please refer to Chapter 2, Alternatives Eliminated from Detailed Study, of the DEIS.

Alaska, however, have indicated that mountain goats have moved farther The mountain goate remaining in the Heintzleman Ridge and Mt. Bullard paths (as weather allows), and at least 1000' distances from wildlife helicopter activity provided helicopters maintain recommended flight who were involved in studies of mountain goats in northern southeast number of goats prior to the beginning of that activity. Biologists toward the icefield in years since Juneau has become more populated, Heintzleman Ridge or Mt. Bullard. It is our opinion that they will dependent on the helicopter companies to adhere to flight paths and aducation is needed so pilots are not encouraged (as often happens Egan Drive was constructed, and helicopter activity began. It is Mendenhall Glacier. Therefore, we have no firm estimates of the distance mitigation measures. We believe that increased public now), but are in fact discouraged, by visitors from circling or area appear to have habituated to current levels of belicopter activity. Alaska Department of Fish and Game surveys were not (mountain goats). With increases in authorized landings, the not, however, decrease in numbers with moderate increases in regularly conducted prior to the first Icefield Tours on the unlikely that population of mountain goats will increase on potential for greater wildlife harasament does increase. pursuing wildlife.

A. ...

Any request for an increase in helicopter tours could require additional environmental analysis as required by NEPA.

49.3

helicopter landings that is above the level for 1995, there is nothing to stop the helicopter companies from requesting additional increases in the future. As a land managing agency, the Forest Service has to draw the line at some point, and you have reached it with helicopter tours. The agency simply has to learn to say NO.

Thank you for the opportunity to comment. I'll be anxious to learn of your decision.

Sincerely,

Save Sake

9450 Herbert Plece Junesu, Aleeka 99801

Jenuary 19, 1995

Helicopter Glacier Tours Draft Environments!

Kenneth E. Mitchell Diserict Ranger Juneau Ranger District 8465 Old Dairy Roed Juneau, AK 99801

Dear Mr. Mitchell,

Replying to your request for comments on Proposals for doubling Helicopter Tour Landing Permits, the following is submitted:

1. Helicopter Landing Tour Permits should be completely discontinued, and the U.S. Forest Service should withdraw itself from any connection with these activities.

The reason for this is thet several thousand citizens of the Juneau-Douglas area are seriously edversely effected by these ectivities.

- 2. Exieting level of Helicopter Tour ectivity is contributing to safety concerns and the likelihood of fetelities in collision between excraft.

  Presence of three helicopters in the eree being visually monitored by a small fixed wing elicreft appears to be a contributing fector in the near collision between a Cesene 185 floetplene and an Aleska Airlines Boaing 737 on July 1, 1994, Please refer to Juneau EMPIRE Jenuery 11, 1995.
- Boaing 737 on July 1, 1994. Please refer to Junesu EMPIRE Jenuery 11, 1995. Doubling of Belicopter Permits will increase existion congestion and danger to citizens in the Juneau-Douglae area, which has already experienced several hundred fatalitiesh aviation accidents over the past years, and several fatalitiesths peet year.
  - 3. The U.S. Forest Service ehould disassociate iteelf with promoting ectivities which it does not monitor for compliance of the Permit Specifications, or for Sefety, or to see if the Operstor's even carry Liability

Insurance in the Public Interest.

- 4. Since visitors can see Gleciera enroute to and from Juneau, and by foot, bue, or car at Juneau itself, there is no compelling need to conduct avisation or helicopter tours, and in perticular lending tours. The 'Hrill' type experience is of less value then the sefety considerations of excessive art traffic of different configuration and speeds mingling together in the same area, and the upset and objection of property owners whose Constitutional Rights to the Tranquility of their properties ere violated by these
- 50.5 Helicopter Flight Paths.
- 50.6 6. The costs of Forest Service staffing at several levels handling Helicopter Tour matters must exceed revenues therefrom.

20

The Purpose and Need in Chapter 1 discusses the purpose of issuing permits for helicopter glacier tours. The No Action Alternative analyzes the effects of discontinuing helicopter landing tour permits. Chapter 1, Other Laws and Permits, in Chapter 1 discusses the jurisdiction of PAA and CBJ.

50.2

As described in Chapter 1, Other Laws and Permits, of the DEIS FAR has jurisdiction, including safety, over flights.

.03

These permits are monitored for compliance with permit conditions. As described in Chapter 1, FAA has jurisdiction, including safety, over flights. Helicopter tour companies are required by permit to carry liability insurance.

50.4

As described in Chapter 1, Existing Management Direction, of the DEIS the Forest Service is directed by the Tongass Land Management Plan to emphasize public access in this area. FAA, as stated in Other Laws and Permits, is responsible for the safety of aircraft.

50.5

We have received numerous reports, and have directly observed panic reactions in mountain goats, brown bears, black bears, moose, and wolves when fixed wing or helicopters fly low and circle these animals to get a good, close look. In situations where regular flight paths are followed and distance from wildlife of at least 1000' are maintained, wildlife move from the flight path or habituate to the activity. Helicopter pilots who fly glacier tours for local companies are expected to follow flight paths (weather dependent). They are also expected to maintain 1000' distances from wildlife and avoid circling or pursuing wildlife. The Forest Service can recommend these measures as mitigation under the terms of the permit which is issued and require helicopter companies and pilots to act in a professional manner and avoid unnecessarily disturbing wildlife.

Cont's 1tr of Jan 19, 1995, concerning Helicopter Glacier Tours.

7. The Forest Service should disassociate itself from activities injurious to Alaska Residents; and Forest Service over-staffing in the Juneau-Douglas area should be reduced by the Congress in line with present budgetary objectives. 9.09

Thank you for the opportunity to present my views.

Sincerely, Hell By John A 6'Brien, Sr.

cc: Senator Stevens, Senator Murkowski, Representative Don Young,

RANGER DISTRICT JUNEAU

C'STRICT RANGER DEPUTY RANGER MOVO PINER REC / LANDS -----FAW

Forest Service is not required by law, regulation, or policy to collect fees in excess of cost to issue and administer special use permits.

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January 19, 1995

T RANGER RANGER\_

| E'STRIC<br>L'EPUTY<br>T / M<br>FEC / L<br>F & W  | , |
|--|---|
| Mr. Kenneth Mitchell<br>District Ranger<br>Juneau Ranger District<br>8465 Old Dairy Road<br>Juneau, AK 99801 |   |

REING IN CAPER AND3 The state of Mr. Mitchell:

I wish to express my objection to the substance of and the conclusions reached by your staff in the Helicopter Glacier Tours Draft Environmental Impact Statement.

My objections to the substance and conclusions of this DEIS are numerous. For clarity sake, I will attempt to briefly state each objection, followed by a more detailed review citing specific examples.

- 1) The proposed action, Alternative B, does not provide for a balanced use of the resource as stated in the Purpose and Need Statement and the purpose and need of the permit applicants is neever adequately verified or analyzed for future conflicts between competing interests.
- 2) The design of the noise study performed by the Forest Service was flawed. Furthermore, the technician performing the tests and analyzing the results displayed a bias which minimized the impact of helicopter generated noise.
- 3) The quality of analysis performed throughout the report is poor as there are conclusions made which are not backed by verifiable statements of fact, citing of applicable governmental regulations, or attributable to a particular scientific method or
- 4) The DRIS failed to address an apparent conflict between identified eagle nesting sites which lie in the path of helicopter traffic transiting to and from the Mendenhall Glacier.
- 5) My conclusions and recommendations

1) The purpose and need statement on page 1-3 states: The purpose and need for the proposed action is to meet current public demand for quality guided services which provide safe helicopter access to remote locations on the Juneau Icefield. Meeting this demand includes providing for visitor safety, and an appropriate balance between commercial guided recreation opportunities and non-commercial, non-guided recreation opportunities while minimizing impacts to people and resources. While Alternative B, the proposed action, as discussed on page 4-13 states: "...Therefore, this alternative would cause the greatest number of recreationists highly annoyed by noise and affect the solitude and quiet of these recreationists the most of the five alternatives."

It is my contention that the conclusions arrived at in this DEIS do not provide an appropriate balance between helicopter guided tours and unguided, non-commercial tours. I have brought this point up repeatedly in previous comments to your agency. Under the proposed DEIS, during the months of May through September, the proposed DEIS, during the months of May through September, the proposed DEIS, during the months of way through September, the proposed DEIS, during the months of May through September, knowledge that their recreational experience will be degraded by helicopter noise. The proposed alternative does not strike a balance between the competing user's interests as the statement to gruppose and need insinuates nor does is minimize the impacts to people and resources.

51.1

Purthermore, the consumer demand for non-helicopter guided tours, and the potential conflict between the two, is not adequately studied in this DRIS. Throughout the DRIS, the authors make the assumption that increased tourism in Juneau directly translates into increased demand for helicopter tours while they neglected to state their statistical correlation for the proposed increase in flights to the estimated increase in tourism. It is my contention that many tourists do not appreciate the helicopter noise and this detractes from their recreational experience as was mentioned in the DRIS, and by increasing the number of glacier flighte this, in fact, disenfranchises non-helicopter entrepreneurs from developing a competing service to the helicopter tours in direct conflict with the statement of purpose

2) The design of the noise study conducted by the Porest Service hast spring was flawed. A couple months prior to the arrival of the technician in Juneau, I dropped by the district office to remaind your staff of my previous complaints regarding halicopter noise at my residence on Glacier Highway. As I have stated to your agency repeatedly in the past, the noise from the helicopters is clearly audible inside my house and drowns out the background highway noise. I requested that the technician take belicopters passed overhead in an attempt to scientifically verify my complaint. Not only was I never contacted by your staff once the testing commenced, but measurements were not taken

51.

The Forest Service does not have jurisdiction over flight paths. Any outdoor recreation in Juneau has the potential for overflights of aircraft.

1.2

The demand for non-helicopter guided tours is discussed in Chapter 4, Issue 2, of the DEIS. The discussion of the effects of helicopter landing tours on ground-based recreation user applies to guided tours as well as private, non-guided use.

51.3

The sites for the sound study were selected by personnel from the Juneau Ranger District and the sound specialists from the San Disas Technology and Development Program. Using their best professional judgment, these sites were chosen to represent a cross section of flight paths and locations from which we received complaints about helicopter noise.

letter to your agency dated June 15, 1994. The DRIS states in Chapter to your agency dated June 15, 1994. The DRIS states in Chapter 4 "The main focus of these measurements was on the impact of helicopter sound on local residents." Upon review of the test states displayed in Map 9, it is apparent to me that the sites around Temsco's heliport have an inherently higher level of background noise due to their proximity to the highway and/or the airport than other locations such as my residence near ten mile diacier Highway. The DRIS states on page 4-5: "By discussing the results of the Sound Measurement Study of the sites closest to the flight paths which affect the residential areas, this section can provide an estimate of the level of noise caused by helicopter landing tour traffic and the percent of the community highly annoyed. By avoiding locations which have a lower level of background noise, as was apparently done in this case, leads to the erroneous conclusion that the noise generated by the annoyed residents, than it really does. Therefore, it is apparent that the actual design and implementation of the noise study does not meet the fore mentioned standard in Chapter 4 as the Forest Service did not make a reasonable effort to define a sound measurement site sample group which were truly representative of sites generating the highest number of helicopter noise

Thus, an erroneous conclusion was arrived at as stated in the background and combined levels still had overall sound levels that rated relatively low on the annoyance percentage relationship graph.") since locations such as my residence at ten mile Glacier Highway would, most likely, have disproved this hypothesis by having an even larger difference between background noise and the noise of the helicopters as they pass overhead.

I find the data presented in Table 4-1 and discussed in Chapter 4 as being incomplete and vaque from a scientific viewpoint. A generalized statement in the chapter reads: "Sound measurements were taken as nearly as possible, under conditions representing typical helicopter flight conditions (elevation, frequency and number of ships)". Since the elevation and numbers of helicopters have been an issue in complaints by residents, I feel the study was flawed because the altitudes of the helicopters when the readings were taken were not identified in the study. The reader of this document has no way of knowing if the sound readings were truly representative of a range of altitudes and conditions which the helicopters typically operate under. In a properly performed study, the author should identify all physical characteristics of the data and observations made. The observations should be as closely results are to be applied. This clearly was not done in this study.

51.5

Purthermore, I question the applicability of the analysis method and study quoted in the DRIS ("An index known as the Percent

51.4

Please refer to Response 32.2. Altitudes of helicopters flying over the noise study sites were not noted bscause to do so would require contact with the pilots flying those ships. This noise study was completed (except for specific tests dons with Temsco Helicopters which were conducted at different times than those presented in the Helicopter Sound Study and not included in that study) at times stimated as representative of times when helicopters usually travel to the Juneau Icefield. Measursmants at all the sites except those which necessitated helicopter access, were made without the knowledge of the helicopter companies.

51.5

The residential areas of Mendsnhall Valley, Lemon Cresk, Msndsnhall Peninsula, and North Douglas are all within the influence zone of the Juneau Airport. These areas are an urban setting and can expect aircraft noise.

Highly Annoyed based on an analysis of complaint patterns at various airports nationwide has been developed and is based on standard techniques (Harris 1991)). The position I have presented to your staff in past communication is that it may not be a proper comparison to equate an urban population who lives near an airport, and is accustomed to high levels of noise, to rural Alaskans, such as myself, who are not desensitized to the constant drone of urban noise. I feel this is a misapplication of the Harris 1991 study. Also, the use of this study in the analysis does not take into account duration of the noise. It only deals with the intensity, that is the difference between background noise and the noise present when the helicopters fravel overhead. Folks such as myself have commented to your agency in the past that the numbers of helicopters traveling in groups is itself problematic to us residents on the ground. We have observed that the irritation level has increased in groups to the duration as Temsco has went from packs of two helicopters to packs of threes, fours and now five helicopters in a row. This highly germane issue was overlooked in the study.

51.5

Finally, I question the technician's lack of treatment of the type of sound itself and it's irritating quality. In published accounts of his statements in the Juneau Rmpire and in the DRIS, and and not see any acknowledgment that helicopter noise is more irritating than other aircraft or background noise. In fact, the conclusions reached indicate just the opposite. That is, all noise has the same irritating quality depending on the intensity of the sound (Chapter 4 page 4-4: "Higher background sound levels from these other sources tend to mask the helicopter sounds, to some extent.") This is clearly an erroneous conclusion and there are numerous socientific studies to back this point. I question how this individual could be viewed as a noise expert when this critical point was over looked.

51.6

3) This DEIS contains many statements or conclusions which are not verifiable statements of fact, attributable to a particular scientific method or study, or are basically incorrect. Furthermore, some statements appear to contradict other statements contained in the DEIS. I will sight several of the most questionable statements along with my own corresponding comments.

Based Recreation Users. "The level of annoyance to Ground Based Recreation Users." The level of annoyance would be higher in areas of more solitude and lower in high use areas such as the Mendenhall Glacier Visitor Center." This statement is not a valid conclusion. It assumes that the area has a constant level of high use and therefore a constant level of high background noise. This is not the case. While the Visitor's Center may have periods of high background noise during periods of high use, the periods of high use are not constant. There are many times when I have been at the Visitor's Center noticing that there are no buses or only a few buses with visitors, generating only a small amount of background noise, and the helicopter traffic

51.7

51.6

The sound study you refer to bases its conclusions on the number of individuals highly annoyed by different levels of sound as depicted in a graph which shows the relationship between noise exposure and percentage of community highly annoyed (USFS, 1994, Figure 1). This is a method of measuring noise impact which is accepted within the scientific community and does consider type of sound. The sound study was conducted by experts in this field. Please refer to Response

.

During the summer months of 1994, the Mendenhall Glacier Visitor Center received 265,000 visitors. While there may have been times when fewer visitors were present, it is a proper conclusion to make that this is a "high use area" as described in the DEIS.

Visitor's Center, such as the Bast Glacier trail, Nature Loop, and Mendenhall Lake area, are not subject to the background noise generated by the Visitor traffic yet they have high levels of noise coming from helicopter noise is very loud. Purthermore, areas adjacent to the overflights.

51.7

to pose a threat to hearing safety for either humans or animals. Therefore, the only acoustic impact is that of annoyance to people who reside in areas close to the helicopter flight paths. This statement is incorrect as it does not take into account all effects of this sound on humans subjected to it. That is, it leads the reader to believe that annoyance is the only impact to humans subjected to this irritating sound can be manifested as physical ailments in many people. Furthermore, the later portion of the statement is totally incorrect. People who uge the Mendenhall wisitor's Center and the surrounding area, Heinzelmann Ridge Trail, the Mendenhall River Greenbelt, and many other non-residential areas are acoustically impacted (and annoyed) by the helicopter b) In Chapter 4, page 4-4, the DBIS states: "The study concluded that the sound levels from the helicopters in the noise study were not high enough, nor long enough duration,

51.8

Juneau have found their "visitor experience" less attractive than other visitors in the past. This brings up the question as to whether the tourism growth trend experienced in the 1980s is applicable to the period in question. It is my opinion that we will see a leveling off of tourship visitors due to a number of reasons (shoreside facility limitations, a change in public perception that Alaska is no longer as "trendy" a vacation destination as other places, etc.). Furthermore, even if increases in visitor traffic do occur, the statement that "an equal increase in demand for helicopter landing tours" is not substantiated. The DRIS does not present any data or studies which corroborate such of In Chapter 4, page 4-18, projections of tourism traffic in Juneau is discussed: "The projections for tourism in Juneau show that visitor arrivals grew approximately 3.4 percent annually between 1985 and 1990. It is likely that this growth will continue. If this is projected out to 1999, visitor arrivals would reach 1.1 million that year. This increase would cause an equal increase in the demand for helicopter landing tours." In fact, a recent study by the tourism industry has indicated that recent visitors to correlation. In fact, the statements on pages 2-12 and 4-6 ("The current levels of helicopter tours may meet existing possible that, without landings, interest in the helicopter tours would be less than the companies' anticipated point raised previously suggests that other non-helicopter tours might pick up any increased demand for nature tours demand.") appear to contradict this conclusion. Also, my demand, but reduced levels would not." and "It is also

51.9

which is why it was used in the sound study. The level and effects of accurate scientific study available for analyzing helicopter noise in The sound study conducted by the USFS in 1994 is the most current and this area. Annoyance is a way of measuring sound impacts on humans, annoyance would vary by individual.

The use levels presented in the proposals received from the helicopter projections. Reduce the Number of Landings Allowed Below 1994 Levels under Alternatives Eliminated From Detailed Study in Chapter 2 of the companies indicate increasing demand for helicopter tours. We feel that these requests are reflective of anticipated tourism growth FEIS has been rewritten.

generated by increased visitor traffic.

d) In Chapter 2, page 2-13, the DBIS states: " The Forest Service does not have the authority to stipulate the type of helicopters used by the tour companies." I do not see any citing for this lack of authority. Since the implementation of this particular point could resolve much of the objection to the helicopter noise, I would like to see a clarification of the Forest Service's position. I have previously suggested that any further increase in permitted landings on the Mendenhall Glacier be tied to the applicants use of the new generation "stealth" type helicopters. What can't the Forest Service stipulate that any landings over current levels will be performed only with the new style tail roterless helicopters?

51.10

betailed Study - Reduce the Number of Landings Allowed Below 1994 Levels was justified for elimination because "reduced flight Levels was justified for elimination because" reduced flight levels would not meet the existing demand." This was the only justification outlined for eliminating this alternative. I question how this action could be eliminated without regard for the "balance" clause listed in the purpose and need statement on page 1-3 and as I detailed under number #1 above. That is, if the preparers were properly weighing the balance between the competing user groups in question, perhaps a reduction in flight levels might be in order.

51.11

might be in order.

f) Under the same section, the Forest Service Designated Flight Paths alternative was eliminated. It states in part:
"Because of the close proximity of residential areas to one another, moving flight paths one way or the other would reduce the impacts to some residents but at the same time would increase impacts to others by rerouting flights over the other residents. Therefore, directing the helicopter tour companies to fly specific routes would not be practical and would not decrease impacts but rather move them around. Again this conclusion is partially erroneous. Prior to the last increase in the number of flights, Temsco was flying primarily over my residence and Heinzelman Ridge. I worked with Mr. Engelbrecht at Temsco, asking him to work with the airport manager to designate a third route which parallels the north side of the runway. Using this route in alternation with the route over my house greatly reduced the noise impact to me on the ground. It allows for a greater time lag between helicopter flights. Unfortunately, if flight levels are to be increased, this will reduce any eliminating this proposal on that basis is based on erroneous logic in my opinion.

51.12

4) As I have discussed with your agency, I have repeatedly requested the applicants to fly at a higher altitude over my 51.13 residence. There have been many occasions when they transit the area at altitudes of less than 1000 feet. As Map 6 indicates, and has been photographically verified, there is at least one eagle's

#### 51.10

You are correct, the Forest Service could stipulate that helicopters meet specific noise standards, however, we could not recommend one brand over another. This statement has been deleted. The A-Star helicopter which is the primary helicopter used by the three companies is currently one of the quietest helicopters available. The only no tail rotor helicopter available is a McDonnell Douglas model that can transport only 3 or 4 people. This would greatly increase the number of flights.

#### 51.11

The sound study indicates that the overall impact of current helicopter use as measured in June 1993 is low. Therefore, all alternatives meet the "balance" statement in the purpose and need.

#### 1.12

The primary reason the designated flight path alternative was eliminated was because the Forest Service does not have the jurisdiction to regulate flight paths. This is discussed in Forest Service-Designated Flight Paths in Chapter 2 of the DEIS.

#### 51.13

Stipulating penalties is an administrative action and will be addressed during the permitting process.

have routinely observed the applicants (Temsco and Coastal Halicopters) fly with a quarter mile of this nest in apparent violation of previous permits and Fish and Wildlife regulations as stated on page 2-11 of the DBIS. Based on the applicants previous disregard for these regulations, I would like to see specific language in the permit which stipulates penalties for violations of these and other permit requirements.

5) Aside from the numerous grammatical and spelling errors
throughout the DBIS, the overall quality of this report is poor
in my opinion. The bias of the preparers, in favor of the
applicants, is apparent in the tone and conclusions reached in
the DBIS. The proposed Alternative B was suggested for adoption
when it "would cause the greatest number of recreationists (to
be) highly annoyed by noise..." due to a 82 percent increase in
the number of flights without recognizing any of the permit
limitations requested by the respondents such as myself.

Alternative D is equally unpalatable from my perspective. Even a
50 percent increase in flights with the use of current technology
does not address the noise problems I have experienced. Limiting
access to the Mendenhall Glacier to one weekend day while
increasing the number of flights additional noise impact to the
other days of the week. Based on the points I have raised above,
I could not find any justification raised by the preparers of
this DBIS to ignore the requests for limitation of helicopter
flights to the number of flights at the 1994 level and
implementing other noise mitigation factors.

My primary recommendation is to throw out the current draft DRIS due to it's poor quality and apparent bias. I would suggest that the current group of preparers should be replaced with a group of individuals who are more objective and are willing to work with, and seriously consider, input from local residents who have objections to the helicopter operations. Finally, I would recommend that the noise study as currently written be withdrawn from inclusion in any future DRIS.

51.15

51.16 recommend designating Alternative C - Authorize Current Level of Landing Through 1999 as the preferred alternative.

I look forward to reviewing the results of this DRIS process. If you wish, I would be happy to meet with you or your staff to discuss these issues further.

Miles W.

Michael Wilde P.O. Box 3182 Juneau, AK 99803

51.14

Thank you for your comment.

51.15

Thank you for your comment.

51.16

Juneau Branch RANGER DISTRICT JUNEAU

Alaska Miners Association P.O. Box 21684 Juneau, Alaska 99802

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C'STRICT RANGER

|                  | 1995                       |
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| DEPUTY RANGER VP | PEC / LANDS January 19, 19 |
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MONTH OF SHILLER Elitan .. nei .. Mr. Ken Mitchell, District Ranger & W. Juneau Ranger District Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

Dear Mr. Mitchell:

This letter constitutes the comments of the Juneau Branch of the Alaska Miners Association on the Helicopter Glacier Tours Draft Environmental Impact Statement.

pilots, attorneys and natural resource managers from mining and native corporations. The livelihoods of the membership are affected mining engineers, prospectors, heavy equipment suppliers, construction and industrial contractors, building supply companies, The Juneau Branch has a membership consisting of geologists and by the decision to be made by the Forest Service on this matter.

Our comments follow:

industry or were environmental organizations. The only organization Alliance went out of business some time ago. We were aware of the organizations contacted, all were either affiliated with the tourist development perspective is the Alliance for Juneau's Future. The scoping process for the subject EIS, however we assumed it was intended to address, as the subject of the EIS indicates, only the A. SCOPING: A review of the scoping section shows that of the contacted that might be considered to represent a resource issue of landing helicopter tours on the Juneau Icefield.

regulation of all helicopter air traffic between Berners Bay and Taku Inlet and, furthermore, that the proposal would regulate (in addition to the regulations at 36 CFR 228, Subpart A) access to federal lands Had we suspected that the proposed decision would result in the for the purpose of conducting mineral operations, we would have become very involved in the process.

This is no small impact since the area in question covers the north half of the Juneau Gold Belt, one of the world's premier gold provinces.

We encourage you to narrow the scope of the decision to helicopter tour landings on the icefield so that the decision to be made is consistent with the scoping phase of the EIS. Alternatively, if the scope of the decision cannot be narrowed, then we are, by this letter, asking you to repeat the scoping process so that natural resource development organizations can participate equally with the environmental and tourist industry organizations in the EIS process.

B. MITIGATION: The mitigation specified on page 2-11 is of considerable concern. The comments are numbered to correspond with specific mitigation requirements.

52.1

1. It is difficult to understand why a special use permit is needed to land on National Forest system lands within "the icefield." This proposal affects every helicopter in the Juneau area except for those operated by the military and those that arrive strapped on the back of a luxury yacht. If someone wanted to land a helicopter at Marine Park in downtown Juneau, then the need for a special use permit is understandable. But for the area between Gastineau Channel and the Canadian border and from Berners Bay to Taku Inlet? Does the Forest Service have the funds to administer this program? Does it have the staff to detect illegal landings? Aside from being unnecessary, this proposal is impractical; it ought to be scrapped.

This requirement is also potentially expensive. The applicant, in this instance a mining company or prospector, will have to obtain, fill out, and file forms at a cost in staff dollars. Alternatively, a mining company could ask the air service to handle the paper work which they probably would, but for a fee. The cost and potential benefits of this requirement need to be displayed and discussed in the EIS.

2. Unless there has been a secret midnight reorganization of the federal government, the Federal Aviation Administration is responsible for the regulation of the nation's air space, not the Forest Service.

52.1

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

..

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

52.2

Mr. Ken Mitchell, District Ranger

3

achieve safe air operations is a statement of the obvious, redundant, A Forest Order requiring air crews to coordinate with the FAA to and potentially lethal in that it could result in a confusion of direction to air crews.

52.2

on the safe operation of aircraft needs to be discussed and disclosed proposed guidelines will sometimes be difficult. The specific distances, their rationale, and the effect of the guideline distances terms of mitigation are however, workable only during clear sunny interferance with wildlife is, in concept, agreeable. The specific 3 thru 6. Compliance with guidelines to avoid unecessary weather. When weather is less pleasant, compliance with the in the EIS.

52.3

animals on a Forest Service form appears to be an end run around the congressional appropriations process. Congress controls the federal government's purse strings; if Congress wanted the Forest Service Requiring air crews to report all observations of certain to conduct a wildlife survey on the Juneau Icefield, it would have provided the funds to do so. Requiring air crews to conduct this survey as a condition of the issuance of a special use permit probably is an unauthorized augmentation of appropriations.

52.4

Flying conditions can, at times, be rather rigorous. When an aircraft the general preference is that the pilot should pay attention to the and pilot are chartered to fly a work party into a remote location, operation of the aircraft, not conduct a wildlife survey for the Forest Service.

that a strong sense of self preservation and experience contributes to safety in field helicopter operations. 8. Unless there has been a secret midnight reorganization of operations to the FAA (see comment #2 above). It should be noted the federal government. . . please leave the regulation of air

52.5

It concerns us very much that the Forest Service has bootstrapped a significant aspect of Juneau's tourism industry. In doing this, the minor administrative act into a magnificent plan for managing a regulate the impacts, positive and negative, that tourism has on Forest Service usurped the perogative of local government to Juneau's lifestyle.

52.6

when visitor safety would be compromised. We recommend flight paths, but do not expect rigid compliance under adverse weather conditions. Forest Service has never recommended or required that mitigation measures for wildlife be followed under adverse weather conditions We respect the professional judgment of pilots to make prudent and appropriate decisions.

Wildlife Biologists, and review of the available literature led to the season, therefore, flight paths were recommended to avoid these areas during critical times for kidding, May 15 - June 15. Several studies goats, wild sheep, etc.) (Foster and Rahs 1983). Distances up to one quarter mile have been recommended in these studies to avoid impacts concentration areas (particularly in spring, summer, and fall when helicopter activity is at its peak). ADFGG was able to provide maps Regarding wildlife mitigation rationale: Forest Service biologists literature for bears, wolves, and other species. One thousand feet have been published which document increasing rates of disturbance with decreasing distances between aircraft and ungulates (mountain regularly consult with ADPEG biologists to identify mountain goat Mountain goats are most susceptible to disturbance during kidding recommendation that helicopters maintain a distance of 1000' from (Stockwell et al. 1991). Consultations with ADFGG Habitat and mountain goats. Specific distances are not recommended in the of kidding areas, breeding areas, and important summer range. seems prudent and reasonable for these species.

least 6 years. The procedure is not complex. At the end of the day pilots stop by the helicopter company office and either mark locations animals seen) and provide observation to the Forest Service at the end Forest Service will soon have the ability to input this information on of the tour season. This report is short - generally 2-3 typewritten pages. The helicopter companies have never indicated that collecting this information has been a problem. Pilots do not map the locations while they are flying, nor do they conduct intense visual searches or analysis, nor are they "wildlife censuses". They do provide general information that we would otherwise not have regarding general surveys for wildlife. Therefore, safety should not be compromised. compile these sighting locations (including species, and number of Helicopter pilots have been reporting wildlife observations for at Service, or write down a sighting location name. Office personnel a Geographic Information System. The sightings cannot be used for of wildlife sightings for that day on maps provided by the Porest distribution patterns.

Likewise, the Forest Service assumed the mantle of the FAA. As a member said, in discussing the DEIS; "Why don't they (the Forest Service) just stick to the ice?"

In closing, we encourage the Forest Service to let the City and Borough of Juneau and the FAA manage those areas over which they have political and regulatory jurisdiction. Should you choose to proceed with the preparation of an FEIS and Record of Decision, then we strongly encourage you to "stick to the ice" and to select Alternative B.

Sincerely,

Roger W. Griffin

Branch Chair

cc: Alaska Congressional Delegation

The permit requires the operators to meet the safety requirements of FAA. The safety plan is part of the operating plan. This mitigation measure has been reworded.

Thank you for your comment.

52.6

Juneau, AK 99301 January 19, 1998 3040 COCOD DUCK

> JUNGAL RANGER DISTRICT 8465 OLD DAIRY RD Juneau, AK 99301. DISTRICT RANGER XED MITCHELL

DEAR MR MITHELL,

POPULATION SHOULD OUTLUSION THE ALMIGNITY TOURIST DOLLAR. THE EFFERS TO OUR EMUNIONMENT WILL BE WITH US LONG AFTER THE TOURISTS ARE GONE AND THIS IS TO LET YOU, AND THE OTHERS MUCLUSED, HELLICOPTER TEASSIL THAT IS PLANNED. THE ESGECTS Know THAT I AM OPPOSED TO THE INCLEASE IN TO THE ENUIDENMENT AS LUFT, AS THE NUMBA THE MONEY SPENT

I NOK YOU ALL TO AECONSIDER.

RANGER DISTRICT JUNEAU

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Thank you for your comment.

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January 19, 1995

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JAN 25 '95

Juneau Ranger District Kenneth E. Mitchell 8465 Old Dairy Rd. uneau, AK 99801 District Ranger

RE: Helkopter Glacier Landings DEIS

Harter Commen

Dear Mr. Mitchell:

companies which allow increased flights and landings in the Juneau Ranger District. The Alaska nonconsumptive wildlife values, and for improvement of the wildlife policy public process. We Thank you for this opportunity to comment on proposals to reissue permits to helicopter Wildlife Alliance is a nonprofit organization that promotes increased protection for wildlife and their habitats in Alaska. Our ~2,000 members also work for equitable representation of have been active on these issues for more than 15 years. The Alliance is concerned about increasing disruptive and high-impact uses of motorized technology, in general, on all public lands in Alaska. Helicopters are, by far, the most disruptive conflicts with the quiet recreation sought by thousands of Alaskans, and visitors to Alaska, every year. In addition, helicopters have enormous real, and potential, impacts on wildlife, as noted in of all motorized uses. In many parts of Alaska, including on the Tongass, their use already the DEIS.

designated should be managed in a manner which would not threaten their potential for a LUD II Due to these concerns, the Alliance does not support increases in helicopter tour activities. determinations, both with Forest Service mandates and other user groups. Those areas not yet icefields area is designated a LUD II, recreational uses must be subjected to strict compatibility jurisdiction. All human uses should be subject to this test. In addition, given that most of the The U.S. Forest Service is charged with maintaining the health of ecosystems under its designation until and unless other management direction is adopted.

54.1

are occurring simultaneously that all address the same basic issue - helicopter tours and landings. Finally, and most importantly, the Alliance is concerned that several planning processes addressed cumulatively, rather than piecemeal. Making the situation worse, the Forest Service has done a poor job of notifying people interested in any one of these proposals of the existence Clearly, this is a forest-wide issue at least, and as such, NEPA demands that the impacts be of the others. This makes a cumulative review even more necessary.

54.2

It is our understanding that four helicopter-tour planning processes are underway. In addition to this one, they address, "heli-hiking" tours in the Haines/Skagway area, helicopter landings within designated Wilderness areas near Sitka, and "helf-hiking" tours in the Juneau area. It seems self-evident that to address the helicopter impacts of tours proposed in the P.O. Box 202022 @ Anchorsge, Alaska 99520 @ (907) 277-0897 @ FAX (907) 277-7423

54.1

Chapter 1, Existing Management Direction, of the DEIS provides Forest Service policies and land management direction for managing these lands.

connected actions, may also be considered together and be part of the The cumulative effects of past, present, and reasonably foreseeable future actions must be analyzed together and be part of the NEPA decision. Other similar, but not and disclosed in the NEPA analysis even though a decision on those The CEQ regulations require that connected actions be considered actions is not part of the current decision. decision, but it is not mandatory.

Each new environmental document must discuss the cumulative effects of possible and so limited the scope to the Juneau Icsfield Study Area. will be discussed. However, to include all projects in one document 1502.1 state that "(s)tatements shall be concise, clear, and to the other proposals. As new projects are analyzed, cumulative effects document unnecessarily complicated. The CEQ regulations in 40 CFR The Forest Service has chosen to keep this document as simple as would make the formulation of alternatives unmanagable and the

The Cumulative Effects section in Chapter 4 of the FEIS has been expanded to include new information that was received since publication of the DEIS.



P.O. BOX 110801 JUNEAU, ALASKA 99811-0801 PHONE: (907) 465-2012

DIVISION OF TOURISM

January 19, 1995

Mr. Kenneth E. Mitchell District Ranger Juneau Ranger District 8365 Old Dairy Road Juneau, Ak 99801

Dear Mr. Mitchell,

It is my understanding the U.S.D.A. Forest Service is considering the elimination of point to point charters without permits in the Juneau Icefield. I am concerned about this proposed action, not the least of which is the negative impact it would have on the region's (and therefore, the state's) tourism industry. As I'm sure you're well aware, soft-adventure tourism is one of the more rapidly growing niches in the industry today, a niche in which Alaska has a great deal to offer. Our visitors are getting younger and more active, and while many may enjoy whitewater rafting or kayaking, scaling mountains or ice-climbing, the majority will be thrilled with just a taste of that type of experience that can be accomplished by most age groups; in many cases, regardless of physical capabilities.

environmental impact, or even noise, I would rather point out that landing and walking on the Juneau Icefield continues to be among the highlights of many of our visitors' Alaska experiences. As one who has had the opportunity to do this, it is ruly unforgettable. As the Director of Tourism for the state of Alaska, I encourage you to approve Alleranive B, issuing five year permits to Temsco, Coastal and ERA thus assuring our visitors of the experience they came to While I could spend time discussing the importance of these landings in terms of economics, Alaska to enjoy

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RANGER DISTRICT JUNEAU

J. 20 J.

D'STRICT POLICES DEPUTY RANGER PEC / LANDS FAW

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MBP/tmw

The Honorable Ted Stevens The Honorable Frank Murkowski The Honorable Don Young ä

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

55.1

HTLI-80

19 January 1995

Kenneth E. Mitchell District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

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77. 6 I M

JUNEAU

Subject: Heli Glacier Tours Draft EIS

After reviewing the Draft EIS I can say I'm not real excited about any of the proposed alternatives. I feel the real problem with the helicopter issue is not glacier landings, but overflights. As the landings increase, the flights double (out and back). Unfortunately the sound recording equipment on Heintzleman Ridge was unable to collect usefull data. I have been up on that ridge and can tell you first hand that the noise created by the overflights is extreme (nearly that of an active heliport).

So it appears that regardless of the number of landings allowed, the flights will continue to increase without restriction by the U.S. Forest Service. As these flights continue to increase and Juneau to grow, the accumulative noise pollution degrades our (and wildlife's) standard of living. I feel that none of the options presented adequately address this or protect Juneau's backcountry from noisy intrusion.

I would like to see a combination of Alternative C and D. Allowing the operators some increase, somewhere between existing levels and the proposed "mid level". It is easier to slowly add landings than to over expand and have to cut landings. Having one weekend day void of landings is a great idea and possibly could coincide with the proposed cruise ship free day.

Sincerely, Ubye Caner

Wayne Carnes Box 240258 Douglas, AK 99824-0258

56.1

Chapter 1, Other Laws and Permits, of the DEIS describes the roles of FAA and CBJ.

56.2

Thank you for your comment.

56.1

56.2

Professional Engineer, Retired P. O. Box 240682, Dept. 152 Douglas, Alaska 99824 Phone (907) 364-2338 Don Halsted

8:26 FM 1/19/95

Please Observe

8465 Old Dairy Road Fax No. 586-8808 Juneau, Alaska

Juneau Ranger District

U S Forest Service

Gentlemen:

Please include the following among the comments on the proposal to allow additional helicopter flights from Juneau to points on the icecap. As a thirty four year resident of Douglas I have watched the airways become more and more crowded with the greatly increased noise levels that result. In the summer the stream of float planes taking off not been heavily impacted by helicopter noise, I can sympathize with those who live close to the flight path to and from the glacier. from the channel makes outdoor activity difficult. Although we have

possible site would be the watershed near Dotsons Landing and upstream of the Glacier Highway. This valiey has already been cleared of timber on the lower slopes by firewood cutting. The area appears to be sufficiently sheltered from the shoreline to avoid To allow these citizens to continue the full enjoyment of thier property and thier neighborhood any material increase in helicopter where the flight paths would not pass over residential areas. One traffic must originate from a site or sites well away from, and high noise levels at the nearest homes. 57.1

Thank you for the opportunity to comment on this proposal.

Sincerely,

Bon Halsted

\* Rose

MAIL PREFERENCE; My address is private information for your exclusive use. It shall not be provided to others for any purpose. Your assistance in keeping the mailbox free of Junk-mail will be appreciated.

57.1

The general area of Amalga Harbor was analyzed in Alternative E.

JWW-20-95 THU 15:12

P. 01

PO Box 21063 Juneau, Alaska, 99802 (907) 586-6517

Juneau Renger District U.S. Forest Sarvica Juneau, Alaska

Regarding: Hallcopter Lending Permits in Wildarness and remota areas of the Tongass

additional permits for helicopter landings in Wilderness Areas of the Tongass. Helicopter and float plane noise in the Juneau area reaches almost unbearable levels during the summer tourist season. Even with the use of a bost it is becoming increasingly difficult to escape the noise. For example, Gastinau Channel and Taku Inlet have hundreds of overfilghts aach day, to the point where it is difficult to have a conversation with a fishing partner off Point Blahop, even though both people are in the same small skiff. Ma would like to express our opposition to granting

We have to protect at least a few token places in Alaska from the noise and intrusion of alroraft. Granting additional helicopter landing permits will just increase the noise in these remote places. We think the ever-axpanding touriet industry is going to be its own undoing in Alaska. We recommend a very conservative approach on this issue. Err on the side of peace and quiet.

RANGER DISTRICT JUNEAU

DISTRICT FAMEER
DEPUTY PANGER 1GVC PLANNER REC / LANDS LING WELL PAW

58.1

No landings in Wilderness areas are proposed through this analysis.

58.1

Federal Aviation Administration of Transportation

RANGER DISTRICT JUNEAU Abetan Region Air Traffic Division

222 W. 7th Avenue \$14 Anchorage, AK 98513-7587 Phone: (907) 271-5464 Fex: (907) 271-2850

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|-----------------|-----------|--------------------|----------------|----------|
| eth E. Mitchell | ct Ranger | au Ranger District | Old Dairy Road | AK 00001 |

Kenne Distric Junea 8465 Junea

Dear Mr. Mitchell:

JAN 19 1995 DISTRICT RANGER REVIEW IT ANHER PEC / LANDS - 11----FAW Z

Thank you for the opportunity to review and provide comments on the Helicopter Glacier Tours Draft Environmental Impact Statement for helicopter tours to the Juneau Icefield

The following comments/suggestions are provided:

- compensation or hire then they fall under the rules of FAR 91.119. which states; Page 1-6,1-7, section H - Only commercial helicopters have the 300 foot above ground level restriction. If a helicopter is not carrying passengers for Helicopters may be operated at less than the minimums if the operation is conducted without hazard to persons or property on the surface. 59.1
- Page 4-12 states "FAA requires a minimum flying height of 300 feet above flightseeing tours. Regardless of the number of flights, it is likely that flight paths alleviate congestion within the airport traffic area as is done for all aircraft within and elevation would not be regulated on a regular basis, only occasionally to commercial operators have worked out voluntary routes and altitudes to help Page 4-12 states "FAA requires a minimum flying height of 300 feet residential areas, this would be the only consistent elevation limitation on this area. This document does not reference the fact that many of the mitigate noise in the airport vicinity.

59.2

the residents/community along the flight paths have already made (and continue Noise impacts are somewhat difficult to evaluate since the Metric used by describing average noise levels over a period of time (usually one year). Since to) noise complaints to the FAA and the City and Borough of Juneau, and while Percentage of Community Annoyed" by the proposed action, which appears to "Integrated Noise Model" used by the FAA, produces noise exposure contours be a single event analysis, is different from the metric used by the FAA. The Noise impacts are somewhat difficult to evaluate since the Metric used
 the U.S. Forest Service (USFS) "Relationship Between Noise Exposure and

59.3

59.1

This section has been changed, see FEIS.

This section has been changed, see FEIS,

59.3

Thank you for your comment. It has been forwarded to the CBJ.

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be recommending to the City and Borough of Juneau that they initiate a complete FAR Part 150 (Airport Noise Compatibility Planning Study) to include issuing Special Use Permits for Helicopter Landings on the Glaciers, the proposed action has the potential to increase traffic. Our Airports Division will the amount of traffic may not increase significantly as a result of the USFS helicopter operations. 59.3

be employed. For example, a survey asking helicopter tour clients if they would have an increased level of interest in helicopter tours if Landings on the Glacier Increase in Noise Levels resulting from the proposed Action vs. No Action could Action)...(Ref. pg. 4-6). It seems that some technique to quantify the potential The USFS seems to dismiss the impacts of the Proposed Action (Issuance of Special Use permits authorizing landing on the Glaciers) vs. no Alternative A - No Action) could be similar to Alternative B (the Proposed Action by issuing statements like 'The effects of noise on residents (of were an option.

59.4

If you need additional assistance, please contact Jack Schommer, Airspace & Procedures Specialist, AAL-532, at (907) 271-5903.

Sincerely,

Manager, Air Traffic Division, 4.2 Willis C. Nelson AAL-500

knowledgeable. Their response determined the statements in the DEIS. The number of helicopter tour clients who would book a flightseeing tour as opposed to a landing tour is unknown. The helicopter tour companies have been asked this question as they are the most

L'STRICT RANGER

CEPUTY PANDER

Attn. Kenneth E. Mitchell, District Ranger 8465 Old Dairy Road **US Forest Service** Juneau, AK 99801 RE: Operational Guidelines for Helicopter Landings within the Tongass.

To whom it may concern

helicopter transport as needing special use permits within the Juneau Icefield Management Zones. While it understandable the Forest Service wishes to regulate helicopter use within the Tongass, I I am opposed to having all alternatives in the Environmental Impact Statement list point to point STATE TO STREET strongly believe this clause does not represent the best interests of the local citizens, the visitor PIEC / LANDS FAW industry, or the helicopter companies involved.

profitable tours. This will cause animosity between locals and the tour industry which is already at an wishing to hire a helicopter any time of the year would be competing against the visitor buying a pre-This point to point transport clause creates a lose - lose scenario for everyone. The local population arranged seasonal tour according to the total number of landings constraint. It's an easy conclusion winter trying to reduce anti-tourism sentiment and this proposal will only drive the wedge deeper. all time high. Many of us in the visitor industry have spent substantial resources and efforts this the less profitable, smaller market segment of local charters will lose to the high demand for

Even if the number of allotted landings per company is higher than the available business, I as well as direction. Most of us who charter helicopter flights for skiing, hiking, climbing, and camping do so at When we decide to go it is often early morning, late the night before, or a weekend, and having to the last minute since these activities are weather dependent. Helicopter skiing is a good example. every other active helicopter chartening friend I have talked to believe the cumbersome, time consuming task of having to get a special use permit to charter a flight is a step in the wrong wait for a permit isn't feasible. 1.09

necessary because of the frequency of use here, but in truth it makes no difference how many trips or should probably be regulated by the FAA). Helicopters, as with any other means of conveyance, are people go to a specific area until there are negative impacts. Having watched and charted Temsco already enforceably regulated through fish and wildlife's "take" policy to protect wildlife. With no visible impacts, why cap a company's earning potential thus limiting its ability to contribute to the landing areas or to wildlife and other forest service concerns in between (noise issues to humans The time consuming hassle of this special use permit will ultimately reduce the business of some and ERA for almost ten years now I can attest to having witnessed no negative impacts at the companies and the numbers cap will do the same needlessly. Some argue the restrictions are health of the local economy.

7

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter

5

It is my understanding the point to point regulations are proposed to close loopholes an existing operator uses to conduct tours. This is a bad management strategy. It punishes above the board companies who operate by existing regulatory intent, the visitor industry, and customers like myself instead of just those you want to tighten the belt on.

In summary, please do not restrict point to point helicopter charters through special use permits. Also, give the helicopter companies who play by the rules and intent of the rules high enough use figure to allow their valuable business room for growth. The visitor industry, the Juneau economy, and locals such as myself will appreciate such a decision.

60.1

Sincerely,

Short

Michael J. Windred 1122 Timberline Cr. Juneau, AK 99801

Mark Kaelke 3718 El Camino

Juneau, AK 99801

CF

# Alaska Forest Association, Inc.



111 STEDMAN BUITE 200 KETCHIKAN, ALASKA 88801-8888 Phone 807-228-6114 FAX 907-228-8820

January 20, 1995

Mr. Kenneth II. Mitchell District Ranger Juneau Ranger District, Tongass National Forest 8465 Old Dairy Road Juneau, AK 99801

Dear Mr. Mitchell:

Thank you for the opportunity to comment on the the Draft Environmental Impact Statement (DELS) the Juneau Ranger District is conducting on Juneau Icefield.

Access is a crucial issue to all industries in the state of Alaska. As Juneau's tourism industry grows, the icefields continue to offer a unique and unforgettable opportunity to Alaska's visitors. Flightsceing is one of the most popular activites, especially the glacier landing tours. Southeast Alaska attracts visitors from all over the world for our rich variety of landscapes and adventures.

Access is critical to many other interests. Southcast Alaska residents use their surroundings for a variety of recreational uses, from hiking and skiing, to hunting and sightsceing. Mineral exploration has been designated through TLMP and the Juneau State Land plan throughout the central portions of the Junuca Gold Belt.

Under all alternatives, the Forest Service proposes to climinate any point to point charters in the Juneau Leofield that are not authorized under a special use permit. If implemented, in the Juneau Leofield will be the only area in the Tongass National Forest with such a restriction. Access to federal land is of critical importance to Alaskans. Denial of that access through the proposed 10EIS would sets a dangerous precedent for federal lands in Alaska. There is no adequate explanation for this restriction.

Noise from both helicopters and fixed wing planes has been reduced through the use of larger, quieter aircraft. Flight paths can be and are in many cases designed with local residence in mind. Low passes and circling over wildlife can and should be

61.1

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

61.2

-discouraged, but normal flight patterns have not proven to be detrimiental to wildlife habitist.

Please support Alternative B, the proposed action. The people of the Tongass need access -for tourism, personal recreation, mineral exploration, timber harvest, etc.- to make a living in this part of Alaska.

Sincerely,

Marieke Nordlinger

61.2

Juneau, AK 99801 January 20, 1995 - Becky Carls L THUTY PANGER F.STRICT PANGER District Ranger T/#3
Juneau Ranger District FC/ LAND3 Kenneth E. Mitchell 8465 Old Dairy Rd. Juneau, AR 99801

Dear Mr. Mitchell:

VIS Trvo Professa

I realize it is probably unrealistic to expect this to be chosen. Of the proposed alternatives presented in the Draft EIS on Helicopter Glacier Tours, I would most prefer alternative A simply because I am tired of all the noise on a daily basis. the proposed alternatives presented in the Draft EIS

Of the remaining alternatives, I would most favor alternative F as causing some mitigation of the current level of noisy activity. Having a break for part of the day and part of the weekend is better than none.

In reference to your maps...There are many eagle nests in the area which are not indicated on Map 6, including several on Fritz Cove Road, one of which is on a ridge behind our house which is located. 6 miles down FCR from Glacier Highway. Both Maps 2 & 7 indicate flight paths which are not over our house or that near to it, but the reality is that they are often flying directly overhead, which means they are also flying over the eagle's nest. Page 2-11 under Mitigation 5a. states the helicopeers should avoid any eagle nest by at least 1/4 mile, so I want to be sure to bring this to your attention. The tree has been marked as a nesting tree (2 or 3 years ago) and the eagles do use it. I hope you will have a carefully updated map made available for you to use in helping determine the flying routes. 62.2

opinion of having a staging area out the road as it would seem to make matters worse environmentally  ${\bf \hat{k}}$  aesthetically. After briefly scanning the DEIS, I would have to change my 62.3

be interested to know what background levels you would get if you other aircraft noise. The other problem I did not find addressed, is that the duration of high sound levels can be much longer with the helicopters since it often seems to take them much longer to leave one's area than other aircraft do. I would be desired since you include jet noise and fixed wing propeller driven aircraft as part of the background noise level. I expect most folks who object to the helicopter noise also object to Your method of assessing background noise levels leaves much to left out ALL aircraft noise from the measurements, which I believe you really should do. 62.4

am sorry I am unable to do a better job of reviewing this DEIS. but personal circumstances have prevented my doing so.

Sincerely, M. Molika) Arthachor Col.
M. Rebecca Rohrbacher-Carls
(Becky Carls)

Thank you for your comment.

Thank you for your information. We will follow up with U.S. Fish and Wildlife Service who provides us information regarding eagle nest locations, and make needed corrections to our maps for the PRIS.

Thank you for your comment.

helicopter glacier tours. Therefore, for the sound study, the effects of helicopters were studied in comparison to all background sounds. The Purpose and Need, as described in Chapter 1 of the DEIS is for The effects of all aircraft are beyond the scope of this RIS.



1.20-85

Dam certainly not happy with the noise and they want to double the flights. I see absolutely no benefit to the majority of Junear cityens over increased believets, between This whole thing has nothing to the with increasing towards access to the glaciers. The increase the number of belieopter flights to local observes. There in the Mendenhall Valley and on these days when the weather dictates they flying the valley The additional flights, a few owners getrich, the majority of we just get more noise, and thousands and thousands more howing to many townists are enough? Doorsonally feel we have already reached our saturation, point. In I would like to add my thoughts to the rest lining their pockets with townst dollars. If you grant lived here for 26 years and its gotten to the point when I trans an the abover on the anly thing this is about is the holicopter companies of the public comments about the proposal to Dear Sirs:

of the overwhelming number of townists at both leistons. Its a total joke. I honestly believe that wery, very fur people benefit from increased hilliopter flights so please do not approve the permits. Thank you.

Cincerely, Charley Karson 8214 Aspen Avo. Juneau, Ak 99801 (907) 189.5723

PANGER DISTRICT

JAN 20 '95

HOVO PLANNER



January 20, 1995

JUNEAU PANGEH DISTRICT

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Kenneth E. Mitchell District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

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DEPUTY RANGER
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Thank you for this opportunity to comment on the helicopter landing issue. It will be a difficult issue to resolve and we both know your finding will not appease all concerned.

Dear: Ken

Taku Glacier Lodge has been operating as a wilderness retreat and salmon bake since 1979. We offer visitors and residents of Alaska one of the most unique, quality and remote excursions in the state.

My wife Michelle and I bought Taku Lodge in January 1993 from the Maas family. We have worked hard to maintain the quality and remote feeling the Maas' developed. We hear time and time again from repeat customers and new customers alike they go to the lodge for three main reasons: The overall quality of the tour, the natural beauty of the Taku River Valley and the remote, unspoiled setting.

With the increased helicopter traffic the past two years we have had some difficulties, but we've been fortunate to solve the problems in house, largely because of friendship and our association in the visitor industry.

# My concerns in your increased helicopter proposal are as follows:

These excursions (helicopters and ours) are very expensive to produce, meaning the only way we will keep interest in the trip because of the cost, is to offer the best quality and remoteness possible. We understand this and realize any growth must be carefully calculated and considered not to disturb the delicate balances we enjoy now. The results of an additional company operating in the same area, and we know a fourth and fifth are out there, could be catastrophic.

64.1

1 know it would be nice to accommodate all people to all areas, but I don't see bow it can be done here. The traffic corridors are so small that any increased traffic could be a safety issue as well. Also the review process should be shortened from five years.

64.4 In a perfect world, Taku Lodge would like to see the entrants limited to the two edsting carriers and hold their operations to their 1994 numbers in the Taku River area. A new review could be considered in three years.

Thank You,

Ken Ward

64.1

No additional proposals from other companies wanting to land on the Juneau Icefield have been received. If additional requeste are received, a new environmental analysis in accordance with MEPA would be prepared when the application is received.

64.2

As described in Chapter 1, Other Laws and Permits, of the DEIS FAA has

jurisdiction, including safety, over flights. The Porest Service has

encouraged helicopter operators to work together to address the safety issue when landing in the same area.

64.3

Environmental analyses, prepared in accordance with MEPA, are considered to be accurate for five to six years, after which they are to be reviewed to determine if they are still valid. If conditions significantly change during the period addressed in the analysis, the

64.4

Porest Service is required to conduct a new analysis.

- 25/02/1

U.S. Forcet Service, Juneau District

I strongly oppose any increase in helicopter traffic in the Juneau Borough area during the summer season. The number of landings on the Ice Field is the matter under consideration, but this inherently implies an increase in landings, takeoffs, and general helicopter traffic in the Juneau Borough area.

The USFS should consider the cumulative effects of helicopter traffic throughout Southeast Alaska in general, and the City and Borough of Juneau in specific, on wildlife, air safety concerns, social impacts on the local residents and their use of the Forest Service areas, and air and noise pollution.

65.1

In the summer season, at our residence, it has become increasingly imitating to stay out of doors because of the frequency and noise level of the helicopter traffic. I live on Fritz Cove Road so I am used to airplancie noise, and have learned to live with that as a necessary noise for the livelihood of the Juneau community. However, the helicopters are consistently overhead, and have a deafening, initiating noise far exceeding the "imitation factor" delivered by airplane traffic.

65.2

Appearanty each helicopter only seats 5-6 people maximum, so the cost/benefit ratio between the jet alreaft (holding over 100 people and having a irritating noise level of only 1-2 minutes while tarveling at 200+ mph) with a recurrence period of on average about 1 hour, and the helicopters (having an irritating noise level of 5-15 minutes per pass of 5 helicopters at a time) with a recurrence period of about 1/2 hour is radically different. While the "quality of experience" for the helicopter ridges may be greater than jet or small aircraft ridges, the quality of experience of 30,000 people down below who live here is substantially decreased.

65.3

I am also strongly opposed to the relocation of heliports to the "nural" areas of the Borough or Southeast Alaska, as a means of "decreasing" the takeoffs and landings in the airport area. Moving heliports to Duport, Yankee Cove, or some floating facility will not decrease the camulative effects that these machines have on our wildlife, vegetation, and social fabric. I would like the USFS and the helicopter industry to reveal their long range plans for helicopter usage in the Tongasa. I would like the USFS to consider limiting flights/landings/takeoffs to set limits, and barning tourism flights on certain days (i.e., Wednesdays, Sanutays, Sundays). If people need to get up on a glaciet, the USFS should consider recommendation of a more efficient and quieter mode of transport (i.e., transways, roads & over-ice vehicles, cog railways, etc.). These alternative methods are employed throughout Canada, Europe, and the US.

65.4

I make the analogy to a factory belching black smoke. The helicopter business is becoming a public railsance, and is endangering health and safety, as evidenced by the recent near miss near the airport. There are regulations on the issuance of air and water pollution. Please regulate and enforce the helicopters' noise and safety pollution to a decreased and reasonable level.

With Reports, 1/1c

230 Fritz Cove Ba

Mailing Address:
Roger Healy
RO. Box 22571
Jurceu, Alaska 99802-2571

65.1

Please refer to Chapter 4 of the DEIS for a discussion of cumulative effects. As additional environmental analyses, as required by NEPA, are completed, the cumulative effects of the new proposals and existing operations will be considered.

The Cumulative Effects section in Chapter 4 of the PEIS has been expanded to include new information that was received since publication of the DEIS.

65.2

Thank you for your comment.

. n

Jet use is outside the scope of this BIS as described in the Purpose and Need in Chapter 1.

65.4

Table 2-13 in Chapter 2 of the DEIS compares the alternatives, which have limits on hours and days. The Purpose and Need of this EIS as described in Chapter 1 is for helicopter access to the Juneau Icefield. Tramways and other access are outside the scope of this EIS.

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|-------------------|--|---|---|--|---|
|                   |  |   | 66.1  | 66.2   | 66.3  |

66.1

The effects to East and West Glacier Trails were analyzed in Chapter 4, Noise and Visual Disturbance to Ground-Based Recreation Users. The trail to Salmon Creek Reservoir has been added to that analysis.

66.2

As described in Chapter 1, Other Laws and Permits, of the DEIS FAA has jurisdiction, including safety, over flights.

66.3

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\* for Alaska, Inc. 121 Well From Line, Sale 250, Appropriate 1962 18

OZECUTIVE COMMETTEE
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Valden Remoch S. Voor Pescient
volt. Informon Voor President
in Brotin Secretary
in Brogham, Tressurer
no Ademine

67.1

January 20, 1995

Kenneth E. Mitchell, District Ranger uneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

77.

Dear Mr. Mitchell:

FOX; EBSTRICT BEGGER FOR RDC thanks the U.S. Forest Service (USFS) forethe Wpportunity FTC / LANDS to comment on the "Helicopter Glacier Tours -(Danft.

Ballie Tolett The Resource Development Council (RDC) is a statewide,\_ Environmental Impact Statement (DEIS)."

sectors, business associations, labor unions, tourism providers membership-funded organization made up of all resource (including air transportation), Native corporations, local governments and thousands of individuals.

while improving the quality of life. RDC is involved in Alaska resource sector in Alaska and expand the state's economic base RDC's purpose is to encourage a strong, diversified and sound transportation and access issues at many levels, in all three branches of government. Following are RDC's comments concerning helicopter landings in the Juneau Icefield, responses to mitigation measures addressed in the DEIS, and RDC's position on proposed alternatives.

# Helicopter Tours

Additionally, helicopter tours offer physically-challenged sightoption for cruise ship visitors, most of whom have never had Helicopter landing tours offer a unique experience to visitors and residents. In particular, it's an exceptional recreational the opportunity to see a glacier, let alone step foot on one. seers an opportunity they may otherwise not have.

access the wilderness experience. Beyond just providing tourism median age of the tourist in Alaska to be of the age which would There are available demographics which show, for instance, the not only afford the helitour experience, but which needs it to and recreational opportunities, this visitor industry also provides employment and substantial economic benefits to

67.1

USFS DEIS - Juneau Icefield Landings

January 20, 1995 RDC comments - page 2

Controlled, safe and environmentally responsible access is essential to accommodate the growing number of visitors to Alaska and the residents who live and work here. Helicopter landings meet that criteria. There is no doubt the helicopter 'footprint' is Helicopter landings do not jeopardize the wilderness resource, rather allow people extremely small, if any, and non-detrimental to the surrounding environment. the necessary and responsible access to experience it.

new flights paths greatly eliminated aircraft noise problems in many residential and downtown areas. The beneficial aspects of helicopters far outweigh most noise Noise studies conducted by the USFS in 1993 concluded that sound from helicopters resulting from helicopter sound is that of annoyance to people who live close to helicopter flights paths. Further, the City and Borough of Juneau Noise Committee, charged to investigate aircraft noise, concluded that quieter aircraft combined with concerns, which are addressed by other efforts, such as avoidance and flight path does not pose a threat to humans or animals. It also noted that the only impact definition over and around populated areas.

67.t

### Mitigation

presented, none of the mitigation measures should be implemented. The following comments are directed to the mitigation measures detailed on pages 2-11 and 2-12. The mitigation measures addressed in the DEIS need to be re-evaluated. As

There is no doubt that the USFS proposed mitigation measures place a high value on park resources, as does the visitor industry which is seeking to permits for the myriad of activities beyond routine tours unreasonably provide access for the growing tourist market. Requiring special use restricts access to public lands. **-**:

67.2

# Point of Clarification:

landings associated with regular tours. Point-to-point helicopter transportation Special use permits apply solely to guided, scheduled, and frequent helicopter should not be included under special use permits.

exemptions for flight safety. There is no need to issue a Forest Order to achieve safe air operations. As well, the USFS should not create flight The USFS should continue to offer guidance but provide automatic altitude requirements or override pilot judgment in the field. 2,3.

# Point of Clarification:

Federal Aviation Administration (FAA). The FAA should prevail on air decisions, from safety to airport maintenance activities given their expertise and historic The DEIS covers issues of air traffic and air safety under the jurisdiction of the administration. 67.4

mitigation measures detailed under these sections should include statements Air safety should be the priority and under the jurisdiction of the FAA. The 4,5

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

67.4

All mitigation is Air safety is within the jurisdiction of the FAA. subject to the rules of FAA.

| 67.4 OSFS 67.5 6. | USFS DEIS - Juneau teetied Landing |
|-------------------|------------------------------------|
|-------------------|------------------------------------|

7. Tourism operator pilots should not be required to report wildlife observations nor engage in interpretive dialogue, other than standard pilot reports of weather, etc. Pilots should be charged solely with the safety and transport of passengers. Other requirements are beyond the purview of the USFS and pose safety concerns.

9.79

67.7 8. Requiring approval of a safety plan is beyond the scope and jurisdiction of the USFS, this language should be dropped.

67.8 9 Tourism operators should show safety training videos to passengers per FAA requirements only. All other materials should be voluntary in use.

## RDC Proposa

In light of dramatic increases in the number of visitors that Alaska receives each year, it is essential to take tourism into consideration when planning future access and transportation needs within the State.

Regarding the alternatives presented by the USFS, RDC supports alternative B, with the opportunity to increase landings above those outlined. All other alternatives include unnecessarily restrictive provisions and would be unacceptable.

Alternative B should be amended so the Juneau Icefield landings issue may be reopened prior to 1999 if the need arises given increases in visitor and resident demand. As well, tourism operator's allotted permits should not be limited to a specific year, but left to operator supply to meet demand.

Sincerely,

RESOURCE DEVELOPMENT COUNCIL

for Alaska, Inc.

Execultive Director

Covernor Tony Knowles
 The Alaska Congressional Delegation
 Mayor Byron Mallott, City and Borough of Juneau
 Representative Gail Phillips, Speaker of the House
 Senator Drue Pearce, President of the Senate
 Alaska State Legislature Transportation Committee

67.5

We were requested by the U.S. Fish and Wildlife Service to add these mitigation measures.

67.6

This mitigation has been reworded.

67.7

The permit requires the operators to meet the safety requirements of PAA. The safety plan is part of the operating plan. This mitigation measure has been reworded.

67.8

This mitigation measure has been reworded.

67.9

USFS DEIS - Juneau Icefield Landings cc. cont.

January 20, 1995 RDC comments - page 4

Chuck Johnson, President, ERA
Steve Smith, President, Alaska Helicopters
Bob Engelbrecht, President, Temsco Helicopters
Donald Fell, President, Maritime Helicopters
Ken Seaman, President, Evergreen Helicopters
Tina Lindgren, Executive Director, Alaska Visitors Association



January 20, 1995

subj: Helicopter Glacier Tours DEIS "Reply to: 1900/2/20"

Mr Kenneth E Mitchell
District Ranger, US Forest Service
Juneau Ranger District
8463 Old Dainy Road
Juneau, AK 99801
FAX 907-586-8808

Dear Mr Mitchell

ŧ

The comment I wish to submit is that the draft EIS does not address effects on local infrastructure, primarily airport facilities for the helicopters. I undermand from discussion with your staff that this was not identified as an issue during scoping, since the proposed action involves glacier landings, but there could possibly be such effects from the proposed or from alternative actions.

Thank you for the opportunity to comment.

Sincerely,
Aff Carpental
Jeff Carpenter
Aiport Projects Manager

bc [usindeis, 195] ce: Dave Palmar, Acting Airport Mgr. Sharon Deboin, FAA AAL-610

St. 25

166 SOUTH SEWARD STREET, JUNEAU, ALASKA 99801 -

68.1

The need for additional airport facilities is speculative based on the current applications.

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| Kenneth E. Mitchell, District Ranger<br>Juneau Ranger District<br>8465 Old Dairy Road<br>Juneau AK 99801 |
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STATE PLANNER

-istantani-

Dear Mr. Mitchell:

Helicopter landings on the Juneau Ice Field have been studied and studied over the years. They continually prove to be an environmentally safe way for visitors to experience the forest. Glaciers don't require roads, trails or other maintenance. Elderly and physically handicapped citizens can experience this beauty which might not otherwise be available to them.

Please approve Alternative B of your Draft Environmental Impact Statement.



69.1

Thank you for your comment.

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Kenneth E. Mitchell, District Ranger Juncau Ranger District 8465 Old Dairy Road Juneau AK 99801

Dear Mr. Mitchell:

Please approve Alternative B for your DEIS at the proposed level for helicopter landings. Our vast ice field can be shared by the local helicopter companies without impacting the environment and will provide an opportunity for the elderly and the handicapped to enjoy wildeness. Without helicopter flights they will be denied this opportunity.

It is important that local businesses be allowed to plan ahead for summer tourist activities, so your early decision will be helpful to the community and to the businesses involved.



70.1

Thank you for your comment.

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Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

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Marrie g Never Boy 226 Bg Verrieus, ak 99802-2669

71.1

Thank you for your comment.

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Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road

PEC/LANDS
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MINOS PLANITIER

Dear Mr. Mitchell:

Juneau AK 99801

This is a request that you approve the five year permits as outlined in Alternative B of your Draft Environmental Impact Statement.

Not only is the tourism industry an important part of Juneau's economy, but they are also an environmentally safe way for visitors to experience true wilderness.

72.1

Studies of noise impact have confirmed that helicopter noise in insignificant on the community as a whole and has no adverse impact on wildlife. It is important to be able to share our beautiful State with visitors and residents who would otherwise not have the opportunity to see these sites.

Also, regulations being considered should not impact other traditional uses such as hiking, mineral exploration or helicopter flights into the National Forest. With very few exceptions, those who choose to use the wildeness and National Forests value the pristine environment and additional regulations are not necessary.

72.2

Your prompt consideration and approval of Alternative B is appreciated.

(1) John Hebert 10 Jo

72.1

Thank you for your comment.

2.5

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

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| Kenneth E. Mitchell, District Ranger | Juneau Ranger District | 8465 Old Dairy Road | Junean AK 90801 |
|--------------------------------------|------------------------|---------------------|-----------------|
| Kenneth                              | Juneau R.              | 8465 Old            | Junean A        |

HANNE PURITER

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uncau AK 99801

Dear Mr. Mitchell:

This is a request that you approve the five year permits as outlined in Alternative B of your Draft Environmental Impact Statement.

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Your prompt consideration and approval of Alternative B is appreciated.

Minney Hobert Buy 226 Eg Chreun, ak 99002-2669

73.1

Thank you for your comment.

73.2

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

January 20, 1995

U. S. Forest Service 8465 Old Dairy Rd. Juneau, AK 99801 Ladies and Gentlemen

I am writing in regards to the permit in process to increase helicopter flights. I hope your office takes the residents of this community into consideration and not just the demands of the tourist industry.

here since 1979 and we are used to the aircraft noises from the airport. However, the helicopter noise over in my yard. According to F.A.A. the helicopters are supposed to be 500 feet over residential areas and are supposed to stay on the East side of Egan Drive. I have pictures that prove otherwise. the last few years has been so bad that it affects the quality of our lives. On a nice sunny day, when there interrupted. I have pictures, which I have enclosed, that show helicopters descending just above the trees I live on 9081 Miner Ct. which is in the take/off landing path of those helicopters. My family has lived belicopters are flying at very low altitudes. As a result, windows rattle and backyard conversations are are three or four tour ships in town, we have over a hundred helicopters flying over our house. These

74.1

I have also been advised from a real estate salesperson that if I decide to sell my house I should sell it only during the winter. He said that the value of my property would definitely drop if potential buyers would come by when a group of helicopters was flying over. If the proposed permit is granted what time limits will be placed on flying time? Presently they usually stop flying between 8 and 9 PM. Will the time increase to 11 PM? If you grant this application I think it should be with the stipulation that the operation of the flight center be moved to an area where they don't have to fly over residential areas. I suppose, however, that that will be inconvenient and would cut into the lucrative tourist trade.

74.2

If you think my statement about the noise is exaggerated I invite you over to visit on a busy, sunny day for 10 hours of aunoying, nerve-racking noise. In the interest of people living here all year around I hope your agency will not grant this permit for additional flights.

Sincerely,

9081 Miner Ct.

Juncau, AK 99801 (907) 789-2843-

PANGER DISTRICT JUNEAU

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As described in Chapter 1, Other Laws and Permits, of the DEIS the CBJ has jurisdiction over noise.

Chapter 2, Table 2-13, Comparison of Alternative Components, shows the hours of landings for each alternative.

ALABKA MILDERHEBO

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RANGEH DISTRICT

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SEC. 12. 

Phone: 907-835-4300 Fax: 907-835-5679

20 January 1995

P.O. Box 1953 Valdes, AK 99888

> RENT PURITER FIEC / LANDS FAW Ken Mitchell, District Ranger funcau Ranger District huncan, Alaska 99801 8465 Old Dalry Road

Dear Mr. Mitchell:

1.71.84.

The Alaska Wilderness Recreation and Tourism Association is issuing comments on the Helicopter Glacker Tours DBIS on behalf of our recreational members who are impacted by helicopter noise. We are most concerned that the cumulative impacts of the Helicopter Glacker Tours in Juncau, the proposed heli-hiking in the Skagway area (1950/2720), the proposed heli-hiking in the "alpine area of the Juncau forelands between Mendenhall Valley and Berners Bay\*, the request for belicopier landings in Wilderness Areas (file code:2320) and any other regular belicopier traffic is the northern Tongass National Forest be carefully analyzed and mapped.

75.1

recreational users of the Juneau Jeefield. Casual private recreational access to the locafield by helicopter has not been identified as a problem. Granted, there is a need to close the locophole that has allowed at least one helicopter. company to offer tours under the guise of charters. However, in leaving this prohibition you are in essence taking away priority for an existing recreational opportunity that is used primarity by residents (e.g. private charters for heli-skiing and scores to the Juneau Joeffeld for backcountry trips, skiing and climbing) and transferring those We are concerned that the prohibition of point-to-point helicopter transport of passengent, without a special use permit, within areas described in Map 1 will have a detrimental impact on our recreational members and other rights to helicopter companies to sell tours to cruise ship passengent.

75.2

providing the service. This is essential in order to allow those individual recreationalists future access to the area if We also believe that any priority use rights established through private charters (e.g. for access to feefield climbing. limits are set and to ensure that they are able to shop for competitive helicopter rates as they do presently rather than going to a sole-source monopoly. If a simple registration is required in order to allow for these rights to be established we would be supportive (e.g. a posteard which could be completed and mailed to the Juneau Ranger bell-skiing, and nordic touring) be held by the individuals engaging the charter, not by the belicopter company District following actual use).

- We support your mitigation requirements relating to wildlife (numbers 2-9 on pages 2-11 to 2-12). 75.3
- We are concerned with allegations raised as to the accuracy of the noise study (Empire My Turn dated January 19, 1995) and would like to see the noise study revisited. Any study should reflect actual conditions and not include the involvement of the helicopter industry as was alleged in the My Turn column. 75.4
- Alternative P, the 1994 level (or below) with limited hours per day and one weekend day per week without tours. We believe that responsible tourism involves limitations and consideration for local communities. We support 75.5

Nany Lethor on Kus Nancy Lethone President

additional environmental analyses, as required by NEPA, are completed, which includes past, present, and reasonably foreseeable actions. As the cumulative effects of the new proposals and existing operations Please refer to Chapter 4, for a discussion of cumulative effects will be considered.

The Cumulative Effects section in Chapter 4 of the FEIS has been expanded to include new information that was received since publication of the DRIS.

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

Please refer to the mitigation section of Chapter 2 in the FEIS as some of the mitigation has been reworded.

75.4

Please refer to comment 32.2

Thank you for your comment.

1-20-95 Juneau Rango Dist. District Ponger

Dear Ken :

I with in regards to the incurred in De lass Towns a sending permits duthough

landings.

part of most summer days us I live on The Dougles B. short with we now how 706. house & helicoptes 13 planes do not f claves taking of convection outside planes are gineely than they used has makent hedrag

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flights. As described in Chapter 1, Other Laws and Permits, of the DEIS the CBJ has jurisdiction over noise. The Forest Service has jurisdiction over the landings but not the

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has greatly efter the hours per
dent of intrasions into our yade,
alets & home.

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roting on this some, Junish to go on seered as sugremely opposing any increase in their land in their land while I know we are mut

RANGEH DISTRICT J. J. SAU

ESTRICT FANCER 186

Douglas, M.

Box 240516

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76.2

Thank you for your comment.

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Juneau, Alaska, 99802 (807) 586-6517 PO Box 21063

Juneau Ranger District U.S. Forest Service Juneau, Alaska Regarding: Helicopter Lending Permits in Wilderness and remote areas of the Tongass

We would like to express our opposition to granting additional permits for helicopter landings in Wilderness Areas of the Tongass. Helicopter and float plane noise in the Juneau area reaches almost whoearable levels during the summer tourist season. Even with the use of a boat it is becoming increasingly difficult to escape the noise. For example, dastineu Channel and Teku Inlet have hundreds of overflights each day, to the point where it is difficult to have a conversation with a fishing partner off Point Bishop, even though both people are in the same

We have to protect at least a few token places in Alaska from the noise and intrusion of alroraft. Granting additional helicopter landing permits will just increase the noise in these remote place; We think the ever-expanding tourist industry is going to be its own undoing in Alaska. We recommend a very conservative approach on this issue. Err on the side of peace and quiet.

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Please see Chapter 1, Issues, of the DEIS, for a description of the significant issues and Chapter 4 for the analysis of those issues.



## Era Helicopters

RANGEH DISTRICT JUNEAU

W 20 W

January 20

Juneau Ranger District Juneau, Alaska 99801 8465 Old Dairy Road Kenneth E. Mitchell District Ranger

#### Dear Mr. Mitchell:

have organized our comments below under a series of interrelated Glacier Tours - Draft Environmental Impact Statement (DEIS) We Thank you for the opportunity to respond to the Helicopter

### MARKET DEMAND:

Since helicopter icefield tours began in Juneau, operators have who otherwise would be denied the experience, to walk on Juneau's offered a safe, environmentally sound way for thousands of people Southeast Alaska and landing on a glacier is considered a unique, once in a lifetime experience. In response, public demand has icefield. Flightseeing is the highest rated visitor attraction in consistently exceeded operator's projections.

78.1

1998 seasons based on our best estimates at the time. We made that proposal in terms of passengers per tour. In March of 1994, at your In the fall of 1993, Era submitted its proposals for the 1994 confusion in the DEIS's conversion from passenger counts or service request, we extended our projection to the 1999 season. As we underestimation of public demand is somewhat aggravated by approach a decision approximately a year and a half after our original proposal, we find that the problem created by our days to landings.

78.2

considered in a separate, later DEIS. The net result of all of this, is We also anticipated our request for heli-hiking would divert we find the early year numbers of Alternative B are below our some demand, but we now understand that request will be current best estimate of market demand.

78.3

P.O. Box 021468. Juneau. Alaska 99802 (907) 586-2030. Fax (907) 463-3959

78.1

Thank you for your comment.

approximation for the purpose of this analysis. It is recognized that there can be as much as a 4 percent error, however this is adequate The numbers used to convert service days to landings are an for analysis purposes.

78.3

The numbers requested for helihiking will be considered in a separate analysis.

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The level of flightseeing, whether in helicopters or small planes, will be driven by market demand regardless of the number of landings permitted. There are three agencies involved in regulation of these flights. The Federal Aviation Administration is charged with safety of flights, including landings. The City and Borough of Juneau has jurisdiction for regulation of noise. The USFS has responsibility for landings within the National Forest and associated impacts.

The DEIS acknowledges that the impact of landings is negligible, any impact is from flights. Since the USFS only gains authority to place stipulations or restrictions on flights that include permitted landings, a failure to permit an adequate number of landings will cause the market to shift to non-landing flightseeing tours, which can have all the same impacts and over which the USFS will have no jurisdiction.

78.3

Permitting an adequate number of landings, on the other hand, will allow the USFS to continue to mandate operational guidelines and other mitigations for most flights over the Juneau Icefield.

The DEIS acknowledges this fact: For alternatives which constrain or limit the number of icefield landings, helicopter companies, in order to meet demand, have the option of continuing to market helicopter rides as flightseeing tours using the same flight paths as landing tours. Assuming that the demand is being met, the same number of helicopters could be creating the same effect on residents, recreationists, and wildlife under all alternatives, including Alternative A - No Action."

## PREFERED ALTERNATIVE:

Under Alternative B, the DEIS analyzes the potential impacts of allowing Era up to 8,818 landings per year. We believe it is clear from the DEIS that authorizing ERA this level of landings per year on glaciers would not present any significant adverse impacts. This is discussed in greater detail below under "Significant Issues - Environmental Consequences".

78.4

Era requests the USFS to adopt a modification of Alternative B as the selected Alternative. ERA proposes that the USFS authorize ERA to make up to 8,818 landings on the Juneau Icefield each year, 1995 through 1999. Era further proposes that it would notify the USFS in February of each year, of that year's projected number, and distribution per pre-approved glacier, of landings within the total yearly cap of 8,818. Era would not expect to reach the 8,818 landing cap in the early years of the permit, but, though we would hope to

78.5

78.4

Thank you for your comment.

78.5

Notification of each projected use for each year to the limit set by this REIS is an administrative matter outside the scope of this analysis.

avoid doing so, may have to come back to the USFS to request a recvaluation of landing levels in the later years of the permit.

78.5

Since significant impacts at the 8,818 level are thoroughly evaluated in the DEIS under Alternative B, and the public has had an opportunity to comment upon impacts of that level of landings, we believe our proposal is entirely consistent with the NEPA process and would not require any additional public comment period. It is our understanding that you will confer with your legal counsel on whether this approach would require a reopening of the process. If your legal advice differs from our analysis, we would appreciate being notified.

78.6

## DISTRIBUTION OF LANDINGS:

1 - Alternative B in the DEIS identifies six glaciers and allocates Era's landings among them. The flight paths to reach all of these glaciers are similar. Since the DEIS identifies that any impacts are from the flights and the actual landings themselves have negligible effect, Era requests that it be allowed to allocate landings among these six preapproved glaciers as desired.

78.7

2. The DEIS states that the Preferred Alternative will not allow landings in the Death Valley Management zone. No where in the DEIS could we find any basis for this prohibition. If this prohibition is included in the Preferred Alternative in the Final EIS, we request the ability to shift landings allocated to this zone to the other pre-approved glaciers.

78.8

3 - Within the Juneau icefield, Temsco has approved high volume tour landings on the Mendenhall, and Era has approved high volume tour landings on the Norris. All other glaciers receive low volume use. No companies other than Temsco are approved for landings on the Mendenhall, but Temsco has also requested a small number of landings on the Norris.

78.9

The USFS 1987 Environmental Assessment said: "As a general rule, only one operator would be authorized to conduct helicopter tours in a zone where high volume tours is the selected management alternative. The rationale for this decision is based on safety and administrative concerns and concern for cumulative impacts." Era believes the logic of that rationale has not changed and safety would best be served by continuing to limit landings on these two high volume glaciers to one company each.

78.6

Any requests for additional helicopter glacier use in any specific analysa addressed in this analysis would require additional scoping and analysis. To make an analysis for proposals outside of what was presented in the May 17, 1994 scoping letter with the numbers converted from service days to landings would require a supplemental RIS.

78.7

Please refer to 78.6

78.8

The FEIS analyzes the closure of Death Valley Hanagement Zone. Alternative G would reallocate the landings proposed for these areas. Please see Response 78.6.

9.8

The 1987 Environmental Assessment used high and low volume zone designations as a method to analyze helicopter landing tours. This analysis uses proposed numbers of landings as presented by the companies and analyzes the impacts of these number of landings. Norris Glacier Zone is a large area and it is possible to resolve concerns between companies as has been done in the past.

# FOREST SERVICE POLICIES AND LAND MANAGEMENT DIRECTION:

The DEIS lists six policies and directions the USFS will use in reaching its decision. We have listed each of the policies and directions below with accompanying comments:

1 - "Provide a broad spectrum of recreational opportunities in accordance with identified needs and demands."

Helicopters are the only effective means of access to large portions of the Juneau icefield, short of major expeditions. In reviewing the file of public comments received by the USFS we were struck by letters from the disabled supporting helicopter landings as their only means of access to the icefield.

Without helicopter access, iceffed use would be effectively limited to the fringes of the glaciers by a tiny percentage of people with the necessary high levels of training and physical fitness. Even the participants of the Juneau Iceffeld Research Program require ongoing helicopter support. Helicopter landings allow a broad spectrum of users to enjoy recreational opportunities on the icefield.

2- "Give priority consideration to recreational opportunities now being actively utilized by the public for recreational pursuits."

Helicopter landing tours are the dominant form of recreation on the Juneau icefield. Helicopter landing tours are the only form of recreation on the Juneau icefield for which there is unmet public demand or which the USFS has considered limiting.

78.11

3 - "Encourage dispersed recreational use."

Without adequate helicopter landings, recreation on the Juneau icefield will be concentrated on its fringes with increased likelihood of user conflicts. Adequate helicopter landings are the only mechanism available for dispersing recreational use on the Juneau icefield.

78.10

Alternative B was developed from the helicopter companies' requests.

78.11

Thank you for your comment.

4 - "Encourage private land and capital to develop services and accommodations to meet private demands."

Era has invested over ten million dollars in capital investments in Juneau Icefield tours in the last three years. Era stands ready through private land (its heliport) and private capital (three and a half million capital investment in Juneau planned for 1995), to develop and provide services and accommodations to meet private demands.

5 - "Issue and administer special use permits for recreational uses that serve the public, promote health and safety, and protect the environment."

Helicopter icefield landings serve the public as evidenced by the public demand. They have an outstanding record of health and safety (infinitely better than any other form of icefield recreation). Helicopter landings also protect the environment. The DEIS, in discussing effects on the icefield, states: "The effects would vary by alternative but would be negligible."

6 - "Encourage skilled and experienced individuals, organizations, and companies to conduct outlitting and guiding activities in a manner that ensures national forest visitors receive services of the highest quality."

Era is the oldest and largest helicopter company in Alaska. Era has a proven record as a skilled and experienced provider of outfitting and guiding activities and wishes to provide these services in a manner that ensures national forest visitors receive services of the highest quality. The only thing that would prevent Era from doing so, is if the USFS fails to provide an adequate number of permits to meet public demand.

# SIGNIFICANT ISSUES - ENVIRONMENTAL CONSEQUENCES

The 1987 Decision Notice found that:

a. "No threatened or endangered species are known to occur within the proposed use areas."

b - "No subsistence activities occur within the area."

c - The proposed activity will not adversely affect any wetlands or floodplains."

It is our understanding that each of these findings is still true.

The DEIS identified three significant issues during scoping in connection with permitting helicopter landings:

Issue 1 - "The noise that helicopters make during these flights could impact the quality of life for residents in the Mendenhall Valley. Fred Meyer, Auke Lake, Juneau Airport and Lemon Creek Areas."

The USFS's Alaska Helicopter Tours Measurements study concluded, "The overall impact, as gaged by an increase on the annoyance-percentage graph due to the helicopter sounds, is low for most of the measurement sites during this study. Even the sites with a larger difference between the background and combined levels still had overall sound levels that rated relatively low on the annoyance-percentage relationship graph." The impact of Era's flights are even

None of the flight paths for Era's current or proposed icefield tours are in any of the areas identified as areas of concern either during scoping or in the later analysis of the residential noise issue. The DEIS correctly states, "Era ... crosses fewest amount of residential areas." In reviewing the file of public comment we particularly noticed the unsolicited and thoughtful letter from Era's nearest residential neighbor, specifically stating that noise is not a problem and supporting the requested increase in landing levels.

78.12

Prohibiting helicopter landings on one day per weekend (as proposed in Alternative D & F), or on holidays (as proposed in Alternative F), would be an attempt to solve a problem that, at least for Era, does not exist. It would also probably not have desired effects because market demand would simply drive a shift to nonlanding flightseeing tours on that day.

Issue 2 - "These flights could cause noise disturbance to ground-based recreation users of the Mendenhall Glacier Recreation Area, Montana Creek Trail, Heintzleman Ridge Trail, Spaulding Meadows Trail, Auk Nu Trail, The Mendenhall Glacier Visitor Center, the Mendenhall Glacier Campground and Skaters Cabin - both on and off Forest Service managed land."

As with Issue I, none of the flight paths for Era's current or proposed icefield tours are in any of the areas identified as areas of concern either during scoping or in the expanded list in the overview of the later analysis of noise and visual disturbance to ground-based recreation users. The impact of Era's proposed additional landings and associated flights would be so negligible, it is not even mentioned in the discussion of Alternative B under the analysis of

Issue 3 - "Helicopter tours could impact wildlife. Concerns were expressed that helicopter tours could stress certain wildlife species,

78.12

Please refer to Response 78.6

78.13

Thank you for your comment.

especially mountain goats but also bears, and bald eagles located primarily in the vicinity of Heintzleman Ridge, Mount McGinnis, Bullard Mountain, Auke Mountain, and Thunder Mountain and cause deterioration of their health. The noise and sighting of these tours by wildlife is the concern."

Again, none of the flight paths for Era's current or proposed icefield tours are in these areas identified for special concern. Era certainly acknowledges, however, that its flights encounter wildlife. Era has always conducted its tours with the strictest regard for wildlife and will continue to do so. The DEIS states, "Mountain goats appear to have adapted to the regular, somewhat consistent helicopter activity typical of Icefield tours as long as the activity is consistent with mitigations recommended in Chapter 2." Permitting of landings allows the USFS to impose wildlife based restrictions as mitigations. ERA believes its requested landings poses no significant impact to wildlife. Failure to permit landings will result in non-landing flightseeing tours to meet demand without equivalent formal

78.14

# OTHER ENVIRNONMENTAL ISSUES:

I - Effects on the Juneau Icefield

The DEIS correctly states "Physical disturbance at Icefield landing sites is insignificant because nature of the sites and is not a function of number of landings." and "The effects would vary by alternative but would be negligible."

2 - Cumulative Effects

The DEIS focuses mainly on cumulative effects with flights serving the Kensington mine. Era's icefield landing tours have no cumulative effect with these flights and minimal cumulative effect with any other flights.

78.15

3 - Irreversible and Irretrievable Commitments of Resources We agree with the conclusion in the DEIS, "With authorization of special use permits for helicopter glacier tours, there would not be a foreseeable or predicted irreversible and irretrievable commitment of resources."

MITIGATION

1 - Era strongly opposes proposed operational guideline #1 which would prohibit point-to-point helicopter transport of passengers without a special permit within any of the area described in Map 1. Nothing in the DEIS, or in the public comments we have reviewed,

78.14

The impacts to wildlife from all of the helicopter landing tours as described in the alternatives is discussed in Chapter 4, Issue 3, of the DEIS.

78.15

Cumulative impacts of the action must be addressed as required by the Council on Environmental Quality regulations in 40 CFR 1508.7 and 1508.25. The action in the DEIS is the Proposed Action which includes helicopter tours from all three companies. Please refer to the Cumulative Effects section in Chapter 4 of the DEIS which has been rewritten.

78.16

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

Q

supports such a restriction. Such a restriction would improperly restrict legitimate charter use for mineral exploration, research, photography, climbing, and skiing, to name just a few reasons for charters.

We believe if the USFS adopted this requirement for helicopter landings, it would need to do the same for other forms of chartered motorized transportation in the area, including float and wheel planes and boats for all landings within any of the area described in Map 1, an area which includes beaches, salt chucks, lakes, forests, rivers, muskegs, and alpine terrain, as well as the Juneau icefield.

78.16

Era does support a clear distinction between flightseeing tours with landings and legitimate point-to-point charters. Era would be happy to work with the USFS and other helicopter companies to establish a clear distinction between the two.

2 - All authorized operations already coordinate with the FAA to achieve safe air operations. There is no need for a Forest Order on this subject.

78.17

3 - It is our understanding that this operational guideline is intended to require a 1000 foot vertical, or not and, clearance and/or avoidance for key mountain goat breeding and kidding areas and eagle nests as shown on Map 6 and the same clearance for individual mountain goats, brown or black bears, moose, sea lions, and other marine mammals when those animal are seen in time to achieve the clearance. It is our understanding this is not a general requirement that helicopters maintain a minimum 1,000 foot clearance above the ground when travelling to and from landings. We request clarification of this language and that an exemption be added for those times when aircraft safety will not permit such clearance.

78.18

4 - It is our further understanding that mitigation #4 limits the avoidance of mapped mountain goat kidding areas specified in #3 to May 16 to June 15 and is a limitation of #3 rather than an additional restriction. If goats are occupying these kidding areas between June 16 and May 15, the requirement for clearance and/or avoidance for individual animals in #3 will continue to apply.

78.19

5 - Era has no objection to the spirit and intent of #5, a,b, and c. We ask only that an exemption be added for those times when aircraft safety will not permit avoidance of an eagle nest by 1/4 mile.

78.20

78.17

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

78.18

The intent of this mitigation is that helicopters will maintain a 1000' vertical and horizontal distance from the areas identified in Map 6 of the DEIS and recommended by U.S. Fish and Wildlife Service. An exemption for the purpose of either aircraft safety or control tower direction has been added to this mitigation.

78.19

This assumption is correct.

78.20

An exemption for the purpose of either aircraft safety or control tower direction has been added to this mitigation.

6 - Era has strict company policies against hovering over, circling, or harassing wildlife. We do not object to this mitigation requirement as long as it is clear it is not in response to any existing problem or concern about existing Era practices.

78.21

7 - Era's pilots' first responsibility is for safe operation of their aircraft and pilots will also be complying with 1,000 foot wildlife clearance or avoidance requirements. Wildlife management agency experience has shown it to be inherently unsafe to use a pilot as a wildlife census taker. Without exception, these agencies use a biologist riding as a passenger to do wildlife censuses.

78.22

Such an arrangement would obviously be cost prohibitive and not practical for a helicopter tour company. Era would gladly provide the USFS with our pilots' impressions of wildlife concentrations and locations, but we feel the operational guideline as written is dangerous.

8 - Era currently submits and abides by a Safety and Operating Plan. The FAA, however, does not "approve" safety plans as suggested in #8. Era suggests that the USFS require all helicopter tour companies with glacier landing permits to operate under a current FAR Part 135 certificate. The FAA has responsibility for enforcing safety requirements on flight operations. A Part 135 certificate would require that a written operations manual be approved by the FAA and would cover concerns for flight safety.

78.23

9 - Era will provide training for all of its helicopter pilots detailing appropriate aircraft behavior in regards to wildlife, including training in responding to passenger questions. We don't believe that a video for passengers is needed or reasonable.

78.24

We offer the above comments in a spirt of cooperation and appreciation for the work the USFS has put into this process. We are interested in reaching a solution that will allow us to meet market demand, provide a unique and outstanding experience at an affordable price, and minimize any perceived impacts. Regardless of the outcome of this process, Era will continue to seek ways to improve the experience and to handle our tours with minimal disturbance.

In this letter, we have offered, in several places, our understanding of terms or facts that may affect the permits. If any of our stated understandings are incorrect, we would greatly

78.21

Thank you for your comment.

78.22

Please see Response 52.4

8.23

This mitigation has been modified so that the Forest Service is the agency who approves the Operating Plan as required in the Forest Service Handbook (FSH 2709.11,52 Exhibit 01)

8.24

This mitigation has been modified so that passengers will not be required to view a safety video, however, pilots will be required to do so. For passengers, a requirement for a safety poster placed near the loading area will be required.

appreciate you letting us know. Thank you again for this opportunity to comment. We look forward to continued work with you to resolve this issue in the interest of all parties.

Sincerely,

William (Leman

Charles W. Johnson President Era Aviation

HELICOPTERS, INC. =TEMSCO=

(907) 225-5141 (907) 772-4780 (907) 874-2010 SKAGWAY: (907) 983-2809 FAX: (907) 789-7989

1650 MAPLESDEN WAY . JUNEAU, ALASKA 89801

Juneau Ranger District 8465 Old Dairy Road Kenneth E. Mitchell Juneau, AK 99801 District Ranger

Dear Ken:

| DEPUTY PANCER | PEC/LAND8 | 200 | SOVE L'ANNER |
|---------------|-----------|-----|--------------|
|               |           |     |              |

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) - Non- ..... for Helicopter Glacier Tours to the Juneau Ice Field,

This figure does not correspond to the number of landings in Table 2-5 for Alternative C on page SUMMARY: On the first page of the Summary section under Allernative C - Authorize Current Level of Landings Through 1999, it is stated that Temsco would be authorized 6,861 landings. 1994 and will be addressed in my comments on that section. Additionally, in the paragraph on 2-4 that shows 7,407 landings. This number is also not correct in terms of actual landings for Alternative C, the Summary shows ERA being authorized 8,818 landings.

79.1

increase in capacity on the Mendenhall Glacier from 3,636 landings to 5,455 landings. In fact, the 1989 Temsco reported a load factor of 3.95 passengers per trip and carried 23,343 passengers to BACKGROUND: In the Background section on page 1-2 it is stated that Temsco requested an translation to number of landings was made using a load factor of 5.5 passengers per trip. In limit was 20,000 service days with a request to increase that to 30,000 service days. The the Mendenhall Glacier in 5,913 trips 79.2

In the Background: 1992 section on the same page, it statesthat five year permits were authorized for Temsco and Coastal Helicopters. Coastal Helicopters was not authorized a five year permit in this decision. 1992 would have been their first year under permit. 79.3

is a map showing proposed Temsco landing sites. As in past permits, latitude needs to be allowed C. PROPOSED ACTION Landing sites shown for Temsco on Map 2 are incomplete. Attached to change landing sites within the zones due to changing snow and ice conditions and to avoid other user conflicts. Additionally on page 1-4, second paragraph, the description of Temsco's tour routes should read "or over Auke Bay and up...." not "Auke Lake". 79.4

that the tour routes described are in the opposite direction. It should be up Sheep Creek to Norris Glacier and return via Salmon Creek to their heliport. Some of Temsco's Pilot's Choice tours also On the same page under ERA, it is my understanding and observation of how they fly their tours, Creek or around Point Bishop. Return route for Temsco is via Lemon Creek Glacier or from the depart to the east, flying along Douglas Island and following the same route as ERA, up Sheep 79.5

79.1

You are correct, this has been changed.

79.2

You are correct, this has been changed.

79.3

You are correct, this has been changed.

Map 2 has been corrected. Auke Lake has been changed to Auke Bay.

79.5

The changes described in this paragraph have been made.

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~

R SCOPING On page 1-4 it is stated that ads were placed in the Juneau Empire from December 79.6 13, 1991 through January 17, 1993. The second date should be January 17, 1992.

H OTHER LAWS AND PERMITS. The Federal Aviation Administration's jurisdiction extends beyond the airport control zone. FAA has control over all aircraft operations both inside the control zone and in all remaining airpace. The Juneau Tower has control over the airpace within three neutrol aniles of the airport. The Flight Standards Division of the FAA is responsible for all flight operations whether in controlled or uncontrolled airpace. Issues such as flight safety in uncontrolled areas of the Juneau Icefield do come under the juridiction of the FAA. In addition to the 300' rule sited, the FAA also has issued an Advisory Circular AC91.36C, dated March 19, 1982, that recommends 2,000' over noise sessitive areas.

7.67

SERVICE DAYS As LANDINGS. In the past our permits have been based on service days rather than landings. In addition to showing the number of service days (passengers), Temsoo began showing the number of trips and passengers per trip in 1986 to show how we were capable of increasing the number of passengers carried without a similar increase in the number of trips flown. The analysis in the DEIS is based solely on the number of landings which would correspond with the number of trips (one of the primary factors relating to impact of the tours) except in the case of Temsco's Glacier Explorer Tour that has two landings for every trip.

It is not clear from the DEIS if landings will be used as a limit on the permits or, if they are merely being used as a better way than service days to describe the helicopter activity associated with the tours which may not mean much to the public. While I would agree with the use of landings as a tool to explain the helicopter activity to the public, I strongly disagree with their use as a limit.

19.8

Trips, landings, load factors, and passengers per trip can be valuable tools to evaluate improvements made in the carrying capacity while minimizing the impact of noise. But these factors are only one part of the picture. The routes used, altitudes flown, and procedures followed to reduce the amount of sound reaching residential and recreational areas are equally important. Another important factor is the sound produced by the helicopter type being used. In the case of Tenaco, we started out primarily using Hughes 500D belicopters for the tour operation. These were almost half again as loud as the A-Star helicopters we currently use. The impact from the tours at 1994 levels is less than it was eight years ago with a much lower service day capacity. This is due to the use of the quieter A-Star helicopters with two added seats, flying routes and higher altitudes which minimize noise impact. Extensive information hould be considered in the decision. The use of these factors to evaluate the effectiveness of an operator is a reasonable application of the information. Based on our demonstrated ability to increase capacity and minimize noise impact it is reasonable to increase the permit capacity.

79.6

You are correct, this has been changed.

79.7

You are correct, this paragraph has been rewritten.

19.8

Landings are a measurement used in the DEIS because they are easily understandable. The Porest Service is required to issue parmits under service days (FSH 2709) so landings are used only for the analysis and will be used as a guideline to determine the number of service days to be permitted. The DEIS only compares the 1994 helicopter use data with proposed increases, the early helicopter use from 1997 to 1993 was not considered in this analysis. The 1994 passenger to landing ratio indicated by Temaco indicates that there is a 4 percent difference between the passenger/landing ratio used in the DEIS and the figures recently supplied by Temaco Helicopters. We believe that this difference does not significantly affect this analysis.

Using landings as a limiting factor is not a reasonable approach. While operators should be encouraged to use new technology where appropriate, limiting landings may have the opposite effect. Limiting landings may make it more advantageous for an operator to utilize aircraft that have larger seating capacity but make more noise. The net result could be fewer trips but more noise impact.

in 1986. Using a figure of 5.5 passengers per trip to project back to 1989 and the number of trips outlining the various alternatives starting on page 2-2 uses the same figure to estimate the number performance and the permit levels requested by Temsco Helicopters. The underlying assumption in the DEIS bases the number of landings on a figure of 5.5 passengers per trip. This is a figure Mendenhall Glacier, as was done on page 1-2 under Background: 1989, is misleading. In 1989, Temsco averaged 5.19 passengers per trip. This number has increased from 4.2 in 1990 and 3.1 5,913 trips. Using the hypothetical figure of 5.5 passengers per trip underestimates the level of Tensco averaged 3.95 passengers per trip and flew a total of 23,344 passengers with a total of of actual landings that year rather than our reported actual landings of 9,298 and actual trips of flight activity in 1989 and makes the increase in projected number of trips for the 1995-1999 that may be attained by the end of the permit period but is not currently practical. In 1994 7,736. Again this high passenger per trip figure serves to underestimate the actual level of Similarly, the actual number of landings shown for Temsco's 1994 operations in the tables In either case, there are discrepancies with the number of landings in relation to the past period covered by the DEIS appear larger in relation to past levels than is really the case. represented by a cap of 20,000 service days (and subsequent increase to 30,000) on the historic flight activity and makes the projected increases appear larger by comparison.

79.9

A more realistic method to illustrate the likely increase in flight activity would be to use the actual landing figures for 1994 and progressively increase the passengers per trip from the current level of 5.2 over the five year period to a level of 5.5 in 1999. This would show that as the number of passengers increased the number of flights would increase at a slower rate, possibly even decreasing.

Even using the 5.5 passengers per trip, the number of landings in the tables do not correspond with the total service day levels requested by Temsco. I would suggest that service days are shown with corresponding estimates of landings (or flights) based on the formula discussed above. Listed below are the total service days requested by Temsco Helicopters for the years 1995 - 1999;

79.10

| 1992<br>58,000<br>10,545<br>10,545<br>(5.50)                       |
|--|
| 1998<br>58,000<br>10,545<br>10,681<br>(5.43)                       |
| 1997<br>55,000<br>10,000<br>10,242<br>(5.37)                       |
| 1926<br>53,000<br>9,636<br>9,981<br>(5.31)                         |
| 1995<br>50,000<br>9,090<br>9,524<br>(5.25)                         |
| Service Days Landings (5.5 PPT) Landings (average PPT) Average PPT |

79.9

Please refer to Response 79.8.

79.10

Under the CEQ regulations in 40 CFR 1502.8; "(e)nvironmental impact statements shall be written in plain language...so that the public can readily understand them". Service days are an agency term often misunderstood by the public. Landings is a more concise and easily understood term. We chose to use landings as a basis of this analysis because it can be readily understood.

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LIMITING HELICOPTER LANDING TOUR HOURS AND DAYS Alternatives D, F, & G would not allow helicopter landing tours one day a week and G would also not allow landings on Memorial Day, Independence Day, and Labor Day. This restriction unfairly discriminates against those visitors that arrive on the one day of the week, or the holiday, when landing tours are not allowed. The majority of the visitors coming to Juneau arrive by cruise ship. These visitors are only in town for one day or part of a day. The helicopter landing tour is precisely the kind of experience for which they have come to Alaska. They want to get into the wilds of Alaska and experience unique environments such as glaciers. For many, the glacier flight is one of the primary reasons they have come to Alaska. Not allowing landings closes the door to the National Forest for these people.

The tour season in Alaska is already short with 99% of the tour flights taking place during a 4 1/2 month period from mid May through late September. That leaves 7 1/2 months without tour activity. The proposal to not allow tours one day a week and on holidays would shorten the season by another three weeks. Not only would this proposal be an economic hardship for operators and unfair to visions, it would concentrate whatever level of operations are permitted into a shorter period of time. The same number of flights would take place in 6 days that would occur over 7 days without the restriction. This situation raises a concern for safety because of the increased number of the same reason.

One of the reasons Temsco started offering the Pilot's Choice tour was to spread out the helicopter operations both for safety and noise abatement. Similarly, communities have been working with the cruise lines to spread out the ship arrivals more evenly through the week to avoid the large influxes of visitors a few days a week. This approach taxes infrastructure less and maintains a more constant, austainable, and acceptable level of activity through the season. If communities did not see the leveling out of the tour activity throughout the week as a positive change, they would not encourage it and could change the arrival patterns of ships. This would be far more effective than the Forest Service controlling one small part.

79.11

If landing tours are not allowed one day a week it is almost certain that non-landing tours would take place on those days resulting ing the same or, perhaps, greater impact. Without the landing option available to visitors on those days restricted by the Forest Service, demand would be diminished little if any. The results would be loss of revenue to the Federal Government, loss of control by the Forest Service, and a diminished visitor experience.

The restriction on hours of operation has some of the same drawbacks as discussed above. Flights will be concentrated into a shorter time frame contributing to more congestio and visitors will have less opportunity to access the Juneau Icefield and glaciers. Some ships are only in for part of the day. Additional helicopters would have to be operated during the reduced time allowed in order to accommodate the demand.

79.12

79.11

The purpose and need for the DBIS is to meet current public demand for quality guided services while providing for an appropriate balance between commercial guided recreation opportunities and non-commercial non-quided recreation opportunities while minimizing impacts to people and resources. Alternatives D and F would not allow glacier landings one day per week. This was done to provide alternatives which would meet the "minimizing impacts to people and resources" portion of the Purpose and Need. To lessen the loss of opportunities for helicopter glacier landing tours for cruise ship passengers, the prohibited landing day would be "whichever weekend day has the least amount of cruiseship passengers arriving in Juneau over the summer..." as described in Chapter 2 of the DRIS.

19.12

Hourly restrictions were made for the same reasons as described in Response 79.11. Non-tour landings for checking the ice and weather would be considered exempt from the hour and day restrictions.

The hour restrictions proposed in the various alternatives are overly restrictive and bear no relationship to the commonly accepted standardsof established noise abatement procedures at airports or in noise ordinances. The accepted standard for noise sensitive times in aircraft noise assessment is from 11 pm to 7 am. During this time a 10 decibel noise penalty is added to actual recorded sound levels to account for the additional sensitivity. None of the tour flights occur close to these times. The only time the late flights occur is during the long days of early summer when it is light and most people are still active into the late evening. I would recommend eliminating restrictions on hours of landings or operations sinse the tour operations are limited to daylight hours and the city of Juneau has the authority to place restrictions for all aircraft operations on the airport sit is or desires.

For the past several years, Temsco has started tour flights no earlier than 8:00 am, which seems reasonable in light of the normal standards (living near the airport, I know other airplane operations start around 5:00 - 5:30 am.). Because of the way we structure our tours, with guides on the glacier and helicopters returning for another group, and the short distance to the glacier, our first landing normally takes place at 8:15 am with the helicopter returning to the pad by 8:30. It would seem reasonable, if hour restrictions are going to be placed, to change the am landing limit to 8:15 am or to simply state "no landing tours may take-off before 8:00 am". The 8:00 pm landing limit does not pose a problem with our normal tour operations. It would be clearer to simply say all landing tours flights must be completed by 9:00 pm (even on the long days, we are almost always done by 8:30 pm or earlier, but allowances must be made for delayed operations).

Temsco does regularly conduct non-tour flights for the purpose of checking weather and ice conditions and transporting guides to the landing sites on the Mendenhall Glacier (and picking them up at the end of the day). These flights are for safety reasons and, to be most effective, must be conducted prior to the first tour flight. We have operated in this manner since the second year of our permit. The level of these flights is not affected by the increase in service days since guides are used on the glacier whether were flying 100 passengers or 500 passengers in a day. It generally takes the same number of guide flights in either case.

SATELLITE HELIPORT Alternative E. would move helicopter operations from the Juneau International Airport out the road. While this alternative might appeal to some (those living around the airport), it simply moves the impact to an area less suited to deal with air operations. When Tenusco was initially seeking approval to build our hanger, federal and state agencies required an evaluation of all the alternative site locations including out the road. Our present site at the Juneau Airport was determined to be the best alternative.

One of the principal reasons for this choice is the airport environment provides a large area of obstruction free, undeveloped (except for airport related facilities) area for the purpose of aircraft landings and take-offs. This is important for both safety and noise impact reasons. In the case of the Juneau Airport this area is almost 2 miles long, a half mile wide, and bounded on two sides by large areas of non developed land. A satellite heliport would need to have similar area set aside to avoid

79.13

Alternative E was developed because of responses received during the scoping process and because it is an alternative way of meeting the purpose and need. The consequences of this alternative are discussed in the Environmental Consequences, Chapter 4 of the DEIS.

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future incursion or it risks being a safety and noise problem due to inevitable development in the sares.

Just the opposite issue was raised with the Juneau Ad Hoc Noise Committee a few years ago. A proposal was brought for the committee's consideration that would have required the ERA heliport to be relocated to the Juneau Airport. In the Grand Canyon area helicopter operators are being required to move to the airport because of the development that has occurred in the immediate vicinity of their heliports located on non airport land.

79.13

A requirement to establish a satellite would be costly, would not solve a problem (would simply move it and possibly make it worse), and, as pointed out in the DEIS, would have a greater impact on recreational users.

MITIGATION The following operational guidelines (pages 2-11 &12) should be modified or eliminated for the reasons outlined below.

1. Requireds Permits For All commercial Helicopter Landing On the Juncau Icefield. This requirement is being imposed because one operator is not abiding by the Outfitter/Guide regulations. While I, too, am concerned with Coastal Helicopters' tactic. This approach is unnecessary and unduly purishes and restricts legitimate users of point-to-point transportation services. Many people use belicopters to access the Juncau Icefield and surrounding area during all seasons for a wide range of recreational activities that include hiking, skiing, camping, para-sailing, rock and mountain climbing, photography, geological study including glaciology, to name a few. These are legitimate charter operations with enforcement and administration actions of one company. Outfitter/Guide approaches.

79.14

2. Issue a Forest Service Order That All Authorized Operations Will Provide For On-going coordination With the FAA. There is no need to issue a Forest Service Order. The FAA already has jurisdiction over all of our operations. It is inappropriate for the Forest Service to use these permits to tell the FAA how to handle their jurisdiction. Further, many of the operators conducting tours are not under the jurisdiction of the Forest Service since they do not land. If the Forest Service has concerns about air safety and the lack of FAA involvement, it would be most appropriate to contact the FAA directly to express those concerns.

79.15

8. Safety Plan Approved by the FAA. The Safety Plan submitted to the Forest Service for the landing tours is tour specific and is not appropriate for FAA review. We are already required to submit "operations specifications" to the FAA for their approval. These govern all aspects of our flight operations including tour flights.

79.16

79.14

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

15

The first part of this mitigation was a typographical mistake. There was no intent to require a Forest Order.

79.16

This mitigation has been modified so that the Forest Service is the agency who approves the Operating Plan as required in the Forest Service Handbook (FSH 2709.11,52 Exhibit 01)

#### TEMSCO COMMENTS - DEIS January 20, 1995

9. Develop a Training Video for Helicopter Pilots and General Public Detailing Appropriate Aircraft Behavior in Regards to Wildlife. The development of such a video, if done right, would be very expensive and is not within the technical expertise of a helicopter operator. If the Forest Service feels the need for a video on aircraft behavior around wildlife, they and/or the Alaska Department of Fish and Game, in cooperation with operators, would be the appropriate entities to undertake such a project.

79.17

Mitigation that is not acknowledged in the DEIS includes many projects supported by Temsco Helicopters to enhance or provide improved recreational opportunities. These include support for the following projects:

Extension of the Eagle Glacier Trail and cabin construction

Peterson Lake Cabin

Dan Moeller Cabin

79.18

Juneau Helicopter Noise Study Oliver Inlet Tram

Tensco provides support for numerous other projects and groups such as the Juneau Mountain
Rescue Squad and the SEA Dogs.

COASTAL HELICOPTERS: Coastal Helicopters has exhibited a total disregard for the Outfitter/Guide Regulations over the last four or five years. I have documented their actions in numerous letters to the Juneau Ranger District, the Forest Supervisor, and the Regional Forester. They have consistently operated outside the areas and beyond the limits of their permits. In some cases this has conflicted with Temsco's permitted operation impacted our client's experience. Their disregard for noise abatement procedures for flights over residential areas in the vicinity of the Juneau Airport detract from our efforts to follow the procedures of the "Fly Neighborty Program" procedures and increases resident frustration with all helicopter operations. I find it disturbing and imappropriate that Coastal will most likely be granted another permit after their past performance. If they are granted a permit, which I oppose, they certainly should not qualify for a priority use permit and should be advised that the continuation of their performance as in past years will jeopardize their permit

79.19

There are two areas that Coastal Helicopters has applied for that are of specific concern. The first is the Herbert Glacier. The Herbert has been the primary landing area for Ternsco's non-Mendenhall tours for many years. The surface of the glacier at the lower end, where most of our landings occur, is constantly changing and offers relatively few suitable landing areas. This is also the area most consistently used by Coastal Helicopter for their "charter flights" (non-permitted tours) and the area where we have had the most conflicts. Because of the limited suitable terrain, one of their helicopters landing in the area we normally use can preclude us from using the same area. We have interrupting their experience. To avoid this kind of interruption with our own flights our helicopters fly together so they are landing or taking off at the same time or we stagger the flights to avoid conflicts.

79.17

This mitigation has been modified so that passengers will not be required to view a safety video, however, pilots will be required to do so. For passengers, a requirement for a safety poster placed near the loading area would be required.

79.18

Thank you for your comment.

79.19

There is no evidence that any of the helicopter glacier tour companies have violated the terms of their existing permit. Without a violation of federal, state, or local ordinance, or without evidence that they are not providing the service for which they have been authorized, the Forest Service cannot deny a permit for poor performance. The mitigation discussed in 79.14 was developed to eliminate any question as to what type of trip is a charter and what type of trip is a tour. The many negative responses we received regarding this mitigation moved the Forest Service to drop this mitigation from the FEIS.

TEMSCO COMMENTS - DEIS January 20, 1995

One of my biggest concerns is that if Coastal Helicopters is permitted for the Herbert Glacier they will use their limited permitted numbers as a cover to run a much larger number of tours as they have done for the last two years on the Icefield area in general. This will result in increased conflicts on the Herbert Glacier and a diminished visitor experience for the passengers we take to this area.

The Coastal Helicopters permit request for landings on the Eagle Glacier is the second area of concern. The 1987 Juneau Icefield Master Plan set aside the Eagle Glacier as a non landing tour area in response to the concern for a glacier and Icefield access area not impacted by landing tours as a result of the increased helicopter activity elsewhere. This was a reasonable accommodation of other user-groups needs and one of the reasons that the Master Plan was so successful in balancing the needs of various activities on this part of the National Forest. While some of the other zones set aside as non-landing tour zones do not make sense this particular one is important for recreational users. Its change in status would undermine the original compromises and agreements made. There are pher areas available for tour landings and I oppose permitting landing tour operations in this zone.

79.19

WILDLIFE As the DEIS has pointed out, the wildlife species of most concern in the tour areas have become habituated to helicopters. This is evidence of both the responsible manner in which we have conducted flight operations around wildlife and the lack of impact to wildlife by helicopters under reasonable conditions. The same results can be expected in the more dispersed and lower activity areas. As with other impacts, the landing component of the tours has no impact on wildlife and the permitted nature of the landing tour operations gives the potential for a greater degree of control and compliance than non regulated flight activities.

79.20

NOISE TO RESIDENTIAL AREAS While the DEIS points out that the Forest Service Sound Study determined overall impact from the glacier helicopter flights was low, it should also be pointed out that the equivalent sound level (Leq) comparison was designed to measure the heaviest volume of helicopter traffic during a short period of time (one hour or less) and is not representative of the overall 24 hour impact. The results represent the worse case scenario.

Also, helicopter glacier tour flight activity represents only a small percentage of the overall airport activity. In previous helicopter tour permit processes, a comparison of Temsco's tour operations with overall airport activity showed the tour flights to be less than 10% of total activity during the same period. The non-tour flights are also conducted during early morning and late evening hours that represent greater sensitivity to noise. As was pointed out in the DEIS, non landing helicopter and fixed-wing tour flights could and would continue without the permitting of landing tours.

79.21

NON-LANDING TOURS. As the DEIS points out, the only requirement for the special use permit is the landing portion of the tours and this activity has virtually no impact. The DEIS also points out that if landing tours are not permitted it is likely that non-landing tours would be conducted having the same impact. The potential for non-landing tours is certain in circumstances

79.22

79.20

Please refer to Chapter 4, Issue 3, of the DEIS for a discussion of impacts to wildlife.

.21

The issue is helicopter noise. Non-glacier landing helicopter use is discussed in the Cumulative Effects section in Chapter 4 of the DBIS.

79.2

Thank you for your comment.

79.22

where significant demand is not met, such as restricting landing tours one day a week or not allowing eliminate the demand for non-landing tours (because of the availability of the more desirable landing for increases above the 1994 levels. Certainly the approval of the operator requested levels would experience). Likewise, reasonable and minor restrictions or modifications would trigger little demand or likelihood of these alternative tours.

section are in the Mendenhall Valley area. Other trails such as Sheep Creek, Dupont, Salmon Creek, the area of helicopter tours. Most of these and the trails listed in the DEIS, especially those in the Perserverence, Granite Creek, Treadwell, Mount Roberts, and Mount Juneau trails are also within DISTURBANCE TO GROUND BASED RECREATION USERS All of the trails listed in this Mendenhall Valley, are not remote traits and experience other significant noise impacts including road traffic, jet aircraft, lawn mower, and general residential noise.

In the 1987 Juneau Icefield Master Plan, areas were set aside as non-helicopter tour landing areas. These and extensive Wilderness and de facto wilderness areas throughout the region provide opportunities for a greater degree of solitude and remoteness for those that desire it.

to otherwise unreachable areas as well as an educational experience about a unique environment. It The helicopter glacier tours provide an important service to the general public by giving them access be able to reach most of the areas without the aid of the helicopter. Helicopters are one of the least the opportunity to experience these areas. Even the most adventurous and fit among us would not minutes. No road has to be built, no tram constructed, no trail cut. The landscape is left unaltered. is particularly important for the elderly, the handicapped, and families with young children to have intrusive means of access. The only impact is the sound of the helicopter and that is gone within

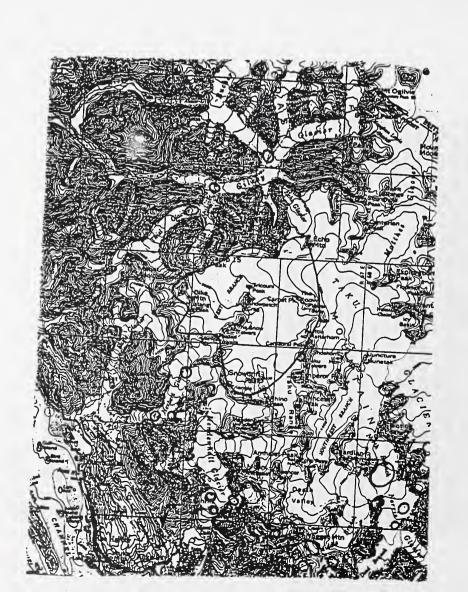
79.23

the ability to increase the number of passengers carried while minimizing any impact in a cooperative Temsco Helicopters has eleven years of responsible operation under permit and has demonstrated manner with the Forest Service. The permit request made by Temsco represents a reasonable expansion of our past operation, meets a significant and demonstrated demand, and should be approved.

Sincerely,

Vice President

Thank you for your comment.



(1)

P.O. Box 21756 Juenau, AK 99802 January 20, 1995

> Mr. Kenneth Mitchell Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

RE: Helicopter Flight Frequency

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Dear Mr. Mitchell:

I am requesting that the Forest Service not allow an increase the number of helicopter flights that are permitted for the Mendenhall Glacier area or other areas in the Juneau area. The current tourist helicopter flight density is way beyond a level that is reasonable for the peace and dignity of the residents to cope with as it is. An increase in this density would be adding further insult to the injury that local residents have to suffer on behalf of the tourist industry.

80.1

I also believe that the techniques the Forest Service has used to assess helicopter noise impact is flawed. I believe that the assessments done two years ago by the San Diego team did not adequately characterize the annoyance that the noise from the tourist flights make on local inhabitants. I would be happy to discuss my concerns with the shortcomings of the assessment technique with your staff.

80.2

I also believe that more studies are needed of impacts of helicopter noise on wildlife are needed before the Forest Service grants more permits to flights over forests it manages. I personally witnessed two incidents of mountain goat behavior alteration resulting from nearby helicopter passage in the Tatshenshini-Alsek Provincial Park (Goat Mtn. area of the Alsek). Such behavior alterations show a significant impact from helicopter noise on wildlife - the Forest Service should research this and restrict helicopter flights accordingly to avoid adverse impacts on wildlife.

80.3

Sincerely, Burell

Richard M. Farnell

80.1

Thank you for your comment.

80.2

Please refer to comment 32.2.

0.3

Long-term impacts are difficult to assess. Costly time budget analyses and productivity studies are generally required over many years to asses long-term effects. It is doubtful that the Juneau Ranger District will receive funding to conduct such a study. Several etudies conducted in other areas to assess impacts of helicopter activity on ungulates (mountain goats and bighorn sheep) have been asset to help us make assumptione regarding impacts of helicopter activity in southeast Alaska (Foster and Rahs 1983, Stockwell et al. 1991, Suring et al. 1988, Harris et al. 1994). We are using some of the best available information to help us make informed

We have received numerous reports, and have directly observed panic reactions in goats, brown bears, black bears, moose, and wolves when fixed wing or helicopters fly low and circle these animals to get a good, close look. In situations where regular flight paths are followed and distance from wildlife of at least 1000' are maintained, wildlife move from the flight path or habituate to the activity. Helicopter pilots who fly glacier tours for local companies are expected to maintain 1000' distances from wildlife and avoid circling or pursuing wildlife. The Forest Service can recommend these measures as mitigation under the terms of the permit which is issued and require helicopter companies and pilots to act in a professional manner and avoid unnecessarily disturbing wildlife.

This is why we believe it is extremely important to educate the public who files with these companies regarding inappropriate behavior like circling or pursuing wildlife. We hope that increasing clients' awareness of streeses placed on wildlife as a result of this type of activity will encourage responsible viewing. Informed visitors would not encourage pilots to approach closer than appropriate, and might even "police" pilots who would otherwise get too close.

SINCER DISTRICT

1000

January 20, 1995

TO: USFS

FROM: John Giaebarg P. O. Box 33445 Juneau, Alaska 99803 RE: Helicopter Glecier Tours

Comment 1 - Require the helicopter operators to provide for improvements to the Thunder Hountain and other trail eystems, including but not limited to planking over muskeg messdows.

Reasons -

81.1

81.2

 helicopter operatione disrupt and are visible to hikere on Thunder and other mountain, and  helicopter operatore cometimes interrupt their glacier flights to land passengere on the ridges et Thunder and other mountaine, 3. passengere who have been dropped off on the ridges of Thunder and other mountains utilized existing traile to descend, and

81.3

4. increased traffic on often unimproved mountain trails by persons who have not hiked up the ease trails and who may be generally unfamiliar with mountain ethics often despoils those trails.

Comment 2 - Establish generous altitude clearences from ground leval, not see level

Reason - helicopter operations annoy hikers and campers and disturb alpine experiences on ridges of Thunder end other mountains even though the pilots are maintaining required see level clearances.

81.4

81.1

There is no authority for the Forest Service to require this mitigation.

81.2

The effects to ground-based recreation use are analyzed in Chapter 4, Issue 2, of the DEIS.

81.3

Under Alaska Region policy (R10 Supplement 2700-92-1, 2721.53a), these landings are considered point to point landings and do not require a special use permit. This BIS addresses only Juneau Icefield tours. Therefore, these hikers are considered forest users just as any other trail user.

81.4

Altitude clearances are under the jurisdiction of FAA and generally are expressed as above ground level (AGL) heights.

n

is the prohibition of point-to-point commercial helicopter transport of passengers without a special use permit. It is our understanding that currently, unless the helicopter operator is There is no apparent need to require a special use permit merely to provide transportation for visitors into this area. This requirement should be reconsidered. If the Forest Service decides to retain this requirement as part of any action alternative adopted, justification for this action should be presented in detail in the final EIS and record of decision. One mitigation measure, common to all action alternatives, which we believe to be unnecessary, conducting an actual on the ground tour of the Juneau icefield, no special use permit is required.

a preferred action alternative. As stated above, this Commission believes that helicopter tours within this area are an appropriate visitor activity that should continue to be allowed. If you We ask that you carefully consider these comments in reaching the final decision on adopting have any questions regarding these comments, please contact our office.

Sincerely,

Stan Leaphart

Executive Director

82.2

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.



### Citizens' Advisory Commission on Federal Areas

3700 Auport Way Esimants, Alasta 99709-4889 (907) 461-2775 Fax: 451-2761

(807) 461-2773 Fax: 451-2701

PANGEH DISTRICT

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FEC / LANDS

, , ,

| fr. Kenneth E. Mitchell | District Ranger | Juneau Ranger District | 8465 Old Dairy Road | luncau, AK 99801 |
|-------------------------|-----------------|------------------------|---------------------|------------------|
| Mr.                     | Dis             | June                   | 846                 | June             |

Dear Mr. Mitchell,

Layor of Annuel

The Citizens' Advisory Commission on Federal Areas has reviewed the Draft Environmental Impact Statement (DEIS) for Helicopter Glacier Tours on the Juneau Icefield. We offer the following comments for your consideration in preparing the final EIS and issuing the necessary permits to the tour operators.

The Commission supports Alternative B- the Proposed Action Alternative. Review of the information contained in the DEIS indicates that this alternative is an appropriate mechanism to accommodate the steadily increasing demand for this type of recreational activity in the Juneau area. Helicopter glacier tours provide a method for visitors to reach an area of the forest that is otherwise inaccessible to the majority of the public. This type of tour also has little, if any, impact on national forest resources. Any impacts which may occur to wildlife or other resources on the forest appear to be short term and only seasonal in nature.

Under the proposed action alternative, the number of helicopter landings will increase incrementally from year to year. This incremental approach could provide opportunities to make adjustments to the number of landings, fight paths and altitudes, and operating hours if significant problems or conflicts with other forest uses arise.

The Commission believes, however, that application of the various mitigation measures, as proposed, will provide adequate protection for public safety and other public resources. We urge the Forest Service to continue to work cooperatively with the helicopter tour operators, the City and Borough of Juneau, the Federal Aviation Administration, and the public to address any new problems or conflicts which may arise during the time frame of the permits. We expect that all responsible management agencies will monitor tour operations and any direct adverse impacts to forest and wildlife resources. Such monitoring activity should provide necessary information for making adjustments to required mitigation measures.

82.1

If conditions change substantially from those analyzed in this EIS, a new environmental analysis could be initiated to review those changes.

NEW MINESCH, RC: DEIS KIU-MB-111

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20 Jappen Prys RANGER

Ken Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, Alaska 99801 RE: Helicopter Glacier Tours DEIS R10-MB-271

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|             |     |     |     |                 |  |

Dear Mr. Mitchell:

First, I am again requesting (prior request date December 7, 1994) that the cumulative impacts of the Helicopter Glacier Tours in Juneau, the proposed heli-hiking in the Skagway area (1950/2720), the proposed heli-hiking in the "alpine area of the Juneau forelands between Mendenhall Valley and Berners Bay", the request for helicopter landings in Wilderness Areas (file code 1320) and any other tourism related helicopter proposals for the northern Tongass National Forest be carefully analyzed and mapped. To be complete, you should consider the impacts of the Kensington-related helicopter flights as well.

84.1

Of the six proposed alternatives considered in the Helicopter Glacier Tours DEIS, I support something between Alternative F (1994 Level with Limited Hours and Days) and Alternative A (No Action). Specifically, I believe nomething in line with 1990 use levels would be adequate to support the helicopter companies and provide service to many visitors while still respecting the rights of other recreationists and residents to be free of helicopter noise nome part of each day and week.

84.2

Regarding the mulgation measures on page 2-11, I strongly object to the prohibition of point-to-point helicopter transport of passengers, without a special use permit, within areas described in Map I. Granted, there is a need to close the loopbole that has allowed at least one helicopter company to offer tours under the guise of charters. However, in issuing this prohibition you are in essence taking away priority for an existing recreational opportunity that is used primarily by residents (e.g. private charters for heli-skiing and access to the Juneau locfield for backcountry trips, skiing and climbild) and transferring those rights to helicopter companies to sell tours to cruise ship passengers. The crowding and noise concerns relating to helicopters are generated by the volume of commercial tours and traffic for sightseeing—not by the private non-commercial charters for local recreational use.

84.3

84.4 | I support your mitigation requirements relating to wildlife (numbers 2-9 on pages 2-11 to 2-12).

I object to your dropping the consideration of an alternative to reduce the number of landings below the 1994 bevels. Although the demand for belicopter tours is ever increasing as cruise lines bring ever more passengers to huneau, the number of repeal passengers no those flights is very low. The Forest Service is not obligated to meet the demands of every individual seeking every opportunity. For example, visitation at Pack Creek is set at limits far below demand to protect the resource and the quality of the experience for individuals. The number of campsities at campsprunds often does not meet demand. The resources are allocated through first some, first served or lottery allocations. Existing demand is set by the cruise lines which push fours as a high profit sale and the belicopter companies pything from ever more tours. With the proposed construction of the Mount Roberts Tram by 1996 there will be an affordable alternative to helicopter tours for spectacular visitas.

84.5

I support the element of the Forest Service proposed alternative which prohibits landings in the Eagle Glacier and Death Valley management zones. I would like to see this expanded to prohibit the landing of helicopters in the Perbert Glacier area has increased significantly over the past few years. As a recreational hike,: I have given up my use of many bureau trails as a result of helicopter noise. Specifically, I now tend to avoid East and West Glacier Trails, Nugget Trail. Heintzleman Ridgs. Thunder Mountain and Mount McGinnis. I hike with trepidation on John Muir and Montana Creek and Peterson Lake

9.48

84.1

Please refer to Response 29.1.

84.2

Thank you for your comment.

34.3

transport of passengers without a special use permit (DBIS, page 2-11) has been removed. 84.4

The proposed mitigation prohibiting point to point helicopter

Please refer to the mitigation section of Chapter 2 in the FBIS as some of the mitigation has been reworded.

.

Please refer to Chapter 2, Alternatives Eliminated From Detailed Study, of the DEIS.

84.6

Herbert Glacier has been traditionally used for helicopter landing tours, therefore, it was included in this analysis. The effects to ground-based recreation use are analyzed in Chapter 4, Issue 2, of the EIS.

JUNEAU RANGER DISTRICT

> Ken Mitchell, RE: DEIS R10-MB-271 January 20, 1995

25.02

Kon Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99801

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|------------------------------|-------|-----|---------------|-------|
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Dear Mr. Mitchell,

I am writing to request that you take into consideration the commutative impacts of the Helicopter Glacier Tours in Juneau, the proposed heli-hiking in the "alpino area of the Juneau forelands between Mendenhall Valley and Berners Bay, the request for helicopter landings in Wildenness Areas and any other tourism related helicopter proposals for the northern Tongass National Forest be carefully analyzed and mapped.

83.1

83.2 I am strongly against any commercial landings in Wilderness Areas. The impact on these areas would be to totally disrupt the wildlife.

| I would support the 1994 level with limited hours and days. We do not have to provide tours for every person who comes to town. The tours offered should not be allocated just for Cruise Ship passengers. A 10 to 20 percent of the allocated landings should be reserved for the independent travellens.

| I do not think that every glacier in the Juneau Area should have a landing site. The number of sites should not be expanded, although I would not object to another site on Mendenhall Glacier.

| The most important is to not impact the Wilderness Areas with landings or close overflights.

It is apparent after reading last night's "My Turn" in the Empire that the helicopter noise study was considerably less than accurate. The noise pollution from the helicopters has increased each year. It is a real problem, even if the studies abow that it does not harm the hearing, which I question.

I do not support any exchasion measures that deny the Juneau Recreationists from access as private parties for heli-aking, hiking, climbing and other such activities. These incidental charters should not be considered in the same light at the Cruise Ship Tours.

Smoonely.

Botty Lou Hart P O Box 21890

P O Box 21890 Juneau, AK 99802 Phone 907-586-2256

83.1

Please refer to comment 87.15.

0

No landings in Wilderness areas are proposed through this analysis.

83.3

Thank you for your comment.

3.4

Not all zones of the Juneau Iceffeld, see Map 1, have landings. The Eagle Glacier and Death Valley Zones have no landings allowed.

83.5

Please refer to Response 47.1.

83.6

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

Coastal should not be permitted to land on the Gilkey nor the Eagle at all. I would prefer not to see any landings on the Herbert Glacker. I support allowing a landing site further up the Mendenhall away from Temsco's landing zones and the site at the Taku.

I most support ERA's routes in that they concentrate in one relatively contained area

84.17

84.16

84.18

influence over the helicopter companies to commit all of the tours to cruise passengers. A mitigation element (or somewhere else, I don't know how this would be included) should include a requirement that a minimum of 10 percent of the helicopter landings be allocated for independent bookings. Otherwise, the ability of locals, visiting friends and relatives and independent visitors (which contribute more per person to the Juneau economy) will be I am concerned that with limited helicopter flights, which there should be, the cruise lines will exercise their excluded from belieopter tours.

I close my letter with a quote from the Petersburg Pilot via the Juneau Empire November 27, 1994

Temsoo officials admit they have landed helicopters at Stikine-LeConte until recently, but have tried to do so in a responsible manner by limiting the number of flights to LeConte Glacier, and avoiding the seal

"We have purposefully kept this from being like Juneau," said Karen Gohmert, local Temsco station manager. "We've tried to be responsible and treat it like a special place."

it is. I hope that the Forest Service can make decisions based on responsibility to the people of Juneau and the need Sounds like even Temsoo recognizes they have not treated Juneau in a responsible manner, like the "special place" for recreational opportunities free of helicopter noise.

Karla Hart 369 & Franklin, Suite 200

Juneau, AK 99801

phone 907-463-3466

P.S. After drafting my letter on the evening of 19 January I had occasion to read the Juneau Empire "My Turn" about the belicopter noise studies from the perspective of one impacted resident who observed the team taking measurements at her residence. Her comments cause me to seriously question the study and the conclusions of the study. A new study should be conducted without the participation or notice to any of the helicopter companies

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84.20

84.16

Please refer to Response 84.15

Thank you for your comment.

transport of passengers without a special use permit (DEIS, page 2-11) The proposed mitigation prohibiting point to point helicopter has been removed.

Please refer to Response 32.2.

not helicopter flights would increase or decrease. That information analysis, although there was no determination made as to whether or Flight seeing helicopter tours were considered as part of this was not available.

20 January 1995

Intelligible to be the property of the propert

94.6

Regarding noise at the Mendenhall Glacier Visitor Center (page 3-4), I suggest that staff received just several complaints regarding the noise for a couple of reasons: I) many visitors come from cities with terrific levels of noise—that is normal to them; 2) visitors are on holiday—why point out something negative?, 3) visitors are on holiday—what good can complaining about the noise possibly do? 4) locals have grumbled about noise for years to no avail—what good will saying anything to staff do? If you really want to study the issue—maybe you should develop a good interview and also look at alternations in the hiking habits of locals in the area and at their reactions to belicopter noise.

84.7

Within the Recreation Area you have neglected to mention the Mount McClinnis Trail. While classified by the Forest Service as a "route" rather than a trail, this "route" is receiving ever more intensive use and works like a trail for me.

84.8

On page 3-5 you list trails outside the Mendenhall Rocreation Area affected by helicopter noise. This list is incomplete. When considering ERA's flights and others to the Taku/Norris area you must add: Sheep Creek Trail, Garnite Creek Trail, Perseverance Trail, Salmon Creek Trail and road, and the Point Bishop Trail. While I have not high these trails in rocent years, looking at the maps I wonder if Lemon Creek Trail and Blackerby Ridge are not also impacted.

84.9

Last summer I visited Cape Pearce in western Alaska to observe walrus. While there I had the misfortune to witness a major walrus disturbance caused by a low overflight of a military aircraft. For the next several days the walrus were extremely easily agitated by aircraft noise. Biologists there commented that different tones of noise from different aircraft affect the walrus very differently. They ignore some, while they are very disturbed by others which may be very distant. I suggest the same phenomena may occur with other animals, including humans. The reason we tolerate fixed wing aircraft noise much better than helicopter noise may have nothing to do with the volume of noise but rather the quality of the noise. I see no discussion of this issue in the DEIS.

84.10

On page 4-4 you state the only acoustic impact resulting from the helicopter noise is that of "annoyance." This does not take into account health impacts of continuing stress from noise.

84.11

I most strongly object to increases in the number of Temsoo's Explorer Tour and any other tour which disperses belicopters beyond the Mendenhall Glacier Area presently used by Temsoo and the Norris/Taku area presently used by ERA belicopters. There should be NO increases in the Explorer tour allowed.

84.13 and solving them.

Your discussion of cumulative impacts (beginning page 4-17) is seriously lacking. The point of cumulative impacts to consider everything together not to segment and dismiss each element. You write that the Kensington FEIS dismissed impacts from the Kensington helicopter traffic as insignificant because it is just an incremental increase to existing air traffic. And the existing helicopter traffic as insignificant when compared with background soice of other air traffic. What is the purpose of a cumulative impact study if not to find a point beyond which no added impact is acceptable? As you are stating, it seems that we could continue to increase noise by a few percent every year until we could never hear but since none of the increases would be significant compared to the existing anties—no problem. I disagree.

84.14

Regarding the maps. I support Tenaco landing sites on the Mendenhall Glacier. None of the others should be permitted. If allowed, they should be at no greater levels than in 1994. I am especially concerned about the Gilkey. Glacier landing site as that impacts another great area of the icefield.

84.7

Thank you for your comment.

84.8

The Mount McGinnis Trail has been added to the analysis as per your suggestion.

34.9

These trails have been added to the analysis as per your suggestion.

84.10

The annoyance factor used in the sound study is a based on standard scientific techniques and is a recognized mathod by the scientific community.

34.11

The annoyance scale shows the percentage of those highly annoyed. Any inferences beyond that are up to the reader.

84.12

Thank you for your comment.

84.13

Thank you for your comment.

84.14

The Cumulative Effects section discloses the effects of the various helicopter activities, however, the Forest Service does not have the jurisdiction to regulate helicopter flights. The Cumulative Effects section in Chapter 4 of the PEIS has been expanded to include new information that was received since publication of the DEIS.

84.15

The Gilkey Glacier has had permitted landings for several years. All of the action alternatives would continue this use at varying levels. The noise impact to residents from flights to the Gilkey is analyzed for each alternative in Chapter 4 of the DEIS. Two areas, Eagle Glacier and Death Valley, were left as no landing zones in Alternative C to allow areas to exist where no helicopter landing impact would occur.

20 January 1995

Ken Mitchell
District Ranger
Juneau Ranger District
8465 Old Dalry Road
Juneau, Alaska 99801

Dear Mr. Mitchell:

I am writing with regards to the Draft Environmental Impact Statement on Helicopter Glacier Tours. I am concerned that non-commercial heli-skiing and helicopter access to the Juneau located for climbing and backcountry skiing will no longer be allowed or will require permitting and hassies. I have been heli-skiing and climbing on the Juneau located for years. Problems retaing to noise and use on the koefield are caused by a high number of commercial tours, not by Juneau residents and friends chartering helicopters to access areas for skiing and backcountry travel. The Forest Service must find another way to restrict tours from operating under the point to point charter guidelines.

86.1

Any priority rights to access the icefield for heli-skiing and climbing that accrue should be given to the individuals who charler the helicopters, not to the helicopter companies. That will ensure that those of us who use the icefield will continue to be able to do so and to seek competitive charler rates to access the cofield.

As a backcoutry traveler I also feel the Juneau Icefield should be divided into wildemess and non-wildemess areas. This would lesson the impact to the entire icefield, keeping impact from tour landings and air traffic to certain locations, while leaving other areas as they are, wildemess.

Sincerely.

86.2

Greg Beck P.O. Box 22576 Juneau, AK 99802

FOLKEAU
RANGER DISTRICT

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L'SIMOT RANGER
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R6.1

The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

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Please refer to Chapter 1, Menagement Direction, of the DEIS for a description of the Land Use Designations for the Juneau Icefield. Only the U.S. Congress can designate Wilderness. In addition, no landings are allowed in either Death Valley or Eagle Glacier.

Ken Mitchell, District Ranger Juneau Ranger District 8465 Old Dalry Road Juneau, Alaska 99801

Dear Mr. Mitchell:

I am concerned about the proposed increase in Helicopter Glacker Tours, the proposal for heli-hiking in the Juneau ares and any other tourism related helicopter proposals for the morthern Tongass Mational Forest be carefully analyzed and mapped.

I object to the prohibition of point-to-point helicopter transport of passengers, without a special use permit. This would take away another recreational opportunity that is used primarily by residents (e.g. private charten for heli-skiing and accoss to the Juneau locafield for backcountry trips, skiing and climbid and transferring those rights to helicopter companies to sell tours to cruise ship passengers. The crowding and noise concerns relating to helicopters are generated by the volume of commercial tours and traffic for sightnessing-new by the private non-commercial charters for local recreational use. Local residents seem to be locaing more recreational land use each year due to the increase in cruise ship traffic.

85.1

The Forest Service is not obligated to meet the demands of every tourist visiting Alsaka. Visitation at Fack Creek is set at limits far below demand to protect the resource and the quality of the experience for individuals. The number of campattes at campgrounds often does not meet demand. The resources are allocated through first come, first served or lottery allocations.

I am employed in a tourism related business and support limited growth in tourism. However, I am finding that the existing demands by the cruise lines which push tours as a high profit sale and the helicopter companies profiting from ever more tours takes sway the opportunity for independent travelers to understand why people like myself live in this community. I am concerned that with limited helicopter flights, which there should be, the cruise lines will exercise their findicence over the helicopter companies to commit all of the tours to cruise passengers. This is just the beginning, we need an overall tourism growth and development plan to be discussed, written and implemented.

85.2

Thursday.

JUNEAU
RANGER DISTRICT

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The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

85.2

The Forest Service has no authority to allocate seats on helicopters.

JUNEAU RANGEH DISTIRICT

JA 20 03

Mr. Ken Mitchell, Juneau District Ranger USDA Forest Service 8485 Old Glacier Highway Juneau, AK 99801

Dear Mr. Mitchell,

| C'STRICT RANGER  DEPUTY RANGER | REC/LANDS | 8 M<br>VIS<br>18VO PLANNER |
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| 285                            | G. C.     | ø ≒ ∺ ∶                    |

I am responding to your request for public comments regarding helicopter traffic within the City and Borough of Junaau. We protest any increase in helicopter traffic over Lemon Creak Valley. We believe the noise impact of helicopters over inhabited areas affect wildlife as well as causes a nuisance.

We live at 5150 Glader Highway next to Vanderblit Creek, at the base of Blackerby Ridge in the Lemon Craek Vallay. We have a domestic flock of ducks and geese in our pond. Noise from helicopter traffic over our property during early summer stresses our waterflow to the point the birds will abandon their nests.

88.1

I do not want to see any increase in helicopter traffic over the Lemon Creek area, as we consider the noise a nuisence, and the noise stresses our flocks. Considering our flocks are domestic animals used to human activities, I suspect this noise further stresses other nesting waterfowl, as well as the baid eagles which nest along Blackerty Ridgs. I trust that the decision you make will take into account the wildlife and their nesting, and rearing.

if you have any questions regarding my letter, please call me at the number listed below.

Sincerely

James Baumgerner Phone 780-8840 P. O. Box 21491 Juneau, AK 99801

88.3

Please see Chapter 1, Issues, of the DEIS, for a description of the significant issues and Chapter 4 for the analysis of those issues.

9029 Rosedale Juneau, Alaska 99801 January 20, 1995

Mr. Kenneth Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau, AK 99810

Re: Helicopter Access to the Juneau Icefield

Dear Mr. Mitchell:

I would like to take this opportunity to express my support for Alternative B for the EIS on the above referenced activity. I am very much opposed to additional government intervention in the lives of individuals and businesses. I am also opposed to anything that creates additional paperwork for government employees. In addition, I oppose any additional permits and paper work on helicopter access, or any other access that may very easily spill over into other business activity such as mining and exploration.

In conclusion, even though some parts of Plan B are excessive, I support Plan B as the least restrictive and would encourage your acceptance.

Sincerely,

Gradony mallin Anthony Williams

> RANGER DISTRICT JUNEAU

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DISTRICT RUNGER 1472 DEPUTY RANGER T/N PEC/LANDB PAW BM

JAV. PLANINER

- John and

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Thank you for your comment.

87.1

Frichesed are several pretitions listing people who oppuse the proposed closure of the June Junes scetulds for point-to-point helicopter twoirs we a special use permit,

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(Fether fictitions prople, dogs, unreadable names)

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The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed.

Juneau, Alaska 99801 4449 Wood Duck Ave. Stephen E. Hale

January 20, 1995

Mr. Kenneth E. Mitchell Junesu Ranger District Juneau, Alaska 99801 8465 Old Dairy Road District Ranger

Dear Mr. Mitchell,

Icefields. Several of the alternatives propose new helicopter tours or an increased number of tours over the few remote areas that are available to families for camping and hiking within the Juneau road system. There are only a few places left to get away from the noise of these helicopters during the tourist season. This letter is in response to the November 21, 1994 Draft Environmental Impact Statement (DEIS) for Helicopter Glacier Tours on the Juneau

My family enjoys camping and hiking in order to have a wilderness experience and to get away from the city noise. Last summer, we camped at the Eagle Glacier cabin for three days. Three helicopters flew over the Eagle Glacier Lake every two hours all three days. I felt like we were under display and the noise was very disturbing.

89.1

of a new heliport near Eagle Beach as these activities would only increase the disturbing noise and totally destroy the purpose of these areas. I am not opposed to helicopter tours as my family have enjoyed them in the past, but there can be too much of a good thing. Thank you for the opportunity I am opposed to helicopter landings on the Eagle Glacier and the location to comment on this matter.

PANCES DISTRICT

Sincerely,

Stephen E. Hale

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89.1

Although helicopters are not permitted to land on Eagle Glacier as part of the helicopter glacier tours, there are no prohibitions on flying over the glacier.

Thank you for your comment.

89.2

causes a physical reaction in me, and I'm sure in others. My chest and throat vibrated and my ears hurt on low altitude passes that day. Even in the valley or on Egan Drive, the helicopter noise is instantly noticeable and stands out prominently from the traffic and other background sound. Simply put, it is When you make your decision you need to consider the nature of the noise as well as its magnitude, something the DEIS completely ignored. The harsh throbbing and low frequency of the helicopters annoying.

91.3

wildlife on these tours. I don't doubt it is a common occurrence despite the current or future prohibitions In regard to effects on wildife: I have heard of more than one episode of helicopters circling and buzzing of it. With your admitted lack of ability to enforce travel routes or altitudes, your operational guidelines for mitigation do not reassure me on this issue.

one of the other accessible glaciers in the Juneau area. You are making it impossible to experience any fords. The Forest Sarvice will likely soon permit helicopters in wildemess glacier areas in Tracy Arm Helicopters have their place here. But the proposed action floods not only Mendenhall but also every mammoth and expensive expedition to ... where? You have proposed the same fate for Skagway area can understand the desire to help others experience the marvels of glaciers through helicopter tours placiers in relative silence and solitude without leaving the Juneau area entirely and mounting some glaciers. Glacier Bay is soon to be overrun with double the number of tour ahips poking into all its and Misty Fjords.

91.5

next ranger will use the same excuse - "the need to meet current public demand to set foot on a glacier" bowever, do know when to stop. And I will after this paragraph. I have little faith that anything I have government agency that serves at the beck and call of big business interests. Five years from now, the - to double the number of landings again for the next five years. Nevertheless, I continue to hope that wonder you're supposed to manage is completely debased and trivialized under the aegis of economic someday, some decision-maker in the Forest Service will say "no" to some action before the natural As I said earlier, you don't know when to stop until you have run a good thing into the ground. I, written will be appreciated by you or will have any effect on your decision. You are not the only development.

Thanks for the chance to speak my piece.

Sincerely,

Juneau, Alaska 99801 525 West 9th Street

and distance from wildlife of at least 1000' are maintained, wildlife maintain 1000' distances from wildlife and avoid circling or pursuing reactions in goats, brown bears, black bears, moose, and wolves when fixed wing or helicopters fly low and circle these animals to get a We have received numerous reports, and have directly observed panic close look. In situations where regular flight paths are followed follow flight paths (weather dependent). They are also expected to move from the flight path or habituate to the activity. Helicopter pilots who fly glacier tours for local companies are expected to mitigation under the terms of the permit and require helicopter companies and pilots to act in a professional manner and avoid wildlife. The Forest Service can recommend these measures as unnecessarily disturbing wildlife. This is why we believe it is extremely important to educate the public activity will encourage responsible viewing. Informed visitors would who files with these companies regarding inappropriate behavior like awareness of stresses placed on wildlife as a result of this type of not encourage pilots to approach closer than appropriate, and might circling or pursuing wildlife. We hope that increasing clint even "police" pilots who would otherwise get too close.

Effects to ground-based recreation users was identified as significant issue and analyzed in Chapter 4.

January 20, 1995

Ken Mitchell, District Ranger Juneau District US Forest Service 8465 Old Dairy Road Juneau, Alaska 99801

Dear Mr. Mitchell:

The following are my personal comments on the DEIS for Helicopter Glacier Tours on the Juneau Ice Field.

I support Alternative C, keeping landings at current level. I would also, secondarily, support Alternative D with modifications — (1) a lower number of landings, 15,000 - 16,000 which is a true mid-level between current and the proposed 22,000; and (2) making Herbert and Eagle Glaciers off limits to belicopters. I also strongly support any decision alternative that gives a "day of rest" to Juneau inhabitants and the glacier country sometime during the week.

91.1

I cortainly bolieve doubling the current traffic is far too much -- too much noise, too much disturbance to goats, eagles, hikers, and Juneau residents.

Tell me, please. Why does the Forest Service seem to allow everything to excess? When you log, you log on a massive scale. When you allow grazing, you allow so many animals on the range that the productivity of the land is impaired. When you allow mining, you permit operations that contaminate atteams for centuries. And now it's mass tourism.

Your DEIS noise analysis seems bogus to me. It seemed so before I read Ms. O'Brien's letter in the paper. But if it is true, as she says, that noise measurements were taken when helicopter operators knew about them and could alter their flight paths, then how can you present the results to the public with a straight face? I'm sure the helicopter companies are laughing up their sleeves.

91.2

Last summer I hiked the West Glacier Trail with out-of-town visitors. Fortunately the weather was bad in the moming, the valley was socked in and no belicopters flew. We reached the trail end just before so most at the weather improved a little (so we could see most of the mountain masses around us) and spent bearing cracks and grouns from the glacier, the occasional distant clattering of rocks slipping off the ice and down scree slopes, the whistling of marmots, and the background noise of the waterfalls that waxed waters?

It was an incomparable time for both the visitors and me. The spell was blasted away, bowever, as the weather cleared enough for the belicopter tours. Every 10 mins. for the rest of the afternoon, five helicopters at a time flow on one side of the valley or the other, coming and going. For the two or three minutes of their passing no sounds of the natural world were audible. When the west side convoys passed it was impossible to converse in a normal voice. That's why it's clear to me your noise enabysis is single digit Dhe increases you claim in the DEIS.

NOTE: Although this letter is labeled as Pish and Game, Mr. Paul has informed us that these are his personal comments and not those of Fish and Game.

91.1

Thank you for your comment.

91.2

Please refer to Response 47.1

91.3

Please see Chapter 4, Issue 2, of the DEIS, Issue 2, for a discussion of the effects of helicopter glacier tours on ground-based recreation users.

91.3

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FAW

Kenneth E. Mitchell, District Ranger Juneau Ranger District 8465 Old Dairy Road Juneau AK 99801

10VO PLANNER

- lien . . . . . . . . .

Dear Mr. Mitchell:

Heljocopter landings on the Juneau Ice Field have been studied and studied over the years. They continually prove to be an environmentally safe way for visitors to experience the forest. Glaciers don't require roads, trails or other maintenance. Elderly and physically handicapped citizens can experience this beauty which might not otherwise be available to them.

Please approve Alternative B of your Draft Environmental Impact Statement.

93.1

Thank you for your comment

Manna J. Nebert Box 22669 Vuneau, CK 97802-2669

RANGER DISTRICT JUNEAU

Juneau, Ak 99801 5870 Thane Road Stephen Wright D'STRICT RAHOER LYD Juneau Ranger District PLOYO 14 ANNAER 8465 Old Dairy Road Licean Level 3.7.3 T/N REC/LANDS FAW 20 Mr. Kenneth E. Mitchell VIS January 20, 1994

Dear Mr. Mitchell,

Juneau, Ak 89801

I em writing to express my opposition to permits to increase the numbers of helicopter zightsseing flights during the summer tourism season. I am very concerned about both noise levels in the Juneau Area and also the impacts on areas that have until now been off limits to helicopter treffic in order to preserve noise-free areas for backpackers and mountaineers.

conducted by some California company that determined there was no noise problem is bogus. I have talked localities in the Juneau Area. The noise is already excessively pervesive. The so called "study" that was to many people in the Mendenhall Valley and other places around town including Thane Roed who are I believe that there are already enough helicopter flights to the Juneau Ice Field and other surrounding constantly irriteted and stressed by noise essociated with helicopter treffic.

reached the saturation point for helicopters! Enough is enough! Let's keep Juneau e decent place for local I propose that more emphasis be concentrated on non-motorized tourism related ectivities. We have already We don't have to turn it into an emusement park to the extreme. people to live year-round.

Sincerely,

Stephen Wright

92.1

Please refer to Response 47.1.

92.2

Thank you for your comment.

92.2

92.1

I support continued helicopter skiing in the Juneau Icefields and the Tongass National Forest and oppose requiring "special use permits" for point-to-point helicopter trips.

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The proposed mitigation prohibiting point to point helicopter transport of passengers without a special use permit (DEIS, page 2-11) has been removed



DHC/SEES

# United States Department of the Interior JUNEAU PANOER DISTRICT

## FISH AND WILDLIFE SERVICE

1011 E. Tudor Rd. Anchorage, Alaska 99503-6199

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| r. Kenneth E. | istrict Ranger | Dad                   | 5 01               | umeau, Alaska |
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Dear Mr. Mitchell:

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The U.S. Fish and Wildlife Service (Service) has reviewed the November 21, 1994, Draft Environmental Impact Statement (DEIS) for Helicopter Glacier Tours on and immediately adjacent to the Juneau Iceffelds. We offer the following comments and recommendations to be included in the Final Environmental Impact Statement (FEIS).

## General Comments

The Service believes that the proposed helicopter activities can be conducted with minimal effects on wildlife and their habitats if the operational guidelines stated in the DEIS are followed. As stated in the Service's November 9, 1994, letter, we recommend research to monitor and evaluate the cumulative and long-term effects from increases in helicopter tours on specific species and habitats. The Service requests copies of any reports produced from these studies and offers assistance to the U.S. Forest Service in planning further mitigation to alleviace any problems that may occur.

94.1

## Specific Comments

- 94.2 Page 2-11, last paragraph. This sentence is not complete and refers to a map that is not provided.
- 94.3 Appendix, Page iv. The name "Bill Schemp" list<u>ed under the U.S. Fish and</u> Wildlife Service heading should be changed to Phil Schempf.")

The Service's Juneau Field Office would be pleased to participate in any interagency meeting and/or field evaluation that may be conducted, and wishes to receive updates on the progress of the plan. If you need any clarification of these comments, please contact Carol Hale of the Juneau office at (907) 586-7240.

Sincerely,

Leave Syrth

Regional Director

94.1

The Forest Service will attempt to conduct the research as funding allows. We will contact your agency for assistance. You will be provided information if and when these studies are completed.

4.2

You are correct, the paragraph you referenced is changed in the FEIS. Our map which shows existing, recorded eagle's nests is kept on file at Juneau Ranger District Office.

94.3

This change has been made.

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Re: Draft EIS on Helicopter Glacier Tours

I support continued helicopter skiing in the Juneau Icefields and the Tongass National Forest and oppose requiring "special use permits" for point-to-point helicopter trips.

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55. Red Jallanowy 4477 Thirtie part. AP 789-1070 654 C MElangal Box 714 Doughashk, 364-2973 59, TRACY LOWELL 4449 Colombia Blud, Jungou 750-2347 60, Dain UL HIMUS BOX 240118 DANGLOS, Ac 463-6103 61 Allison Rice 1686 Harbor Ney Juneus, AK 463-4366

Kenneth E. Mitchell, District Ranger . Juneau Ranger District

Re: Draft EIS on Helicopter Glacier Tours

I support continued helicopter skiing in the Juneau Icefields and

| se requiring "special use er trips.   | PHONE SKG-13KO   | 463-1550              | 463-2619   |  |
|---|------------------|-----------------------|--|--|
| the Tongass National Forest and oppose requiring "special use permits" for point-to-point helicopter trips. | ADDRESS USTACT   | 3565 N. Dougles, Hary | 7.0 Box 20883<br>Bir mile W. Dovo Aux                          |  |
| the Tongass National<br>permits" for point-to   | 1. CASKY WINKING | 2. PAT GOCONER        | 3. Jenna O'Connell ?. o Box 20983<br>812 mile W. Doughuy<br>4. |  |

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Kenneth E. Mitchell, District Ranger Juneau Ranger District

Re: Draft EIS on Helicopter Glacier Tours

| PHONE   | 364-2634                | 780-6550         | ~                           | 5866770                            |                                       | 790 2849                        | 586.2405                      | 364.2539                       | 056 - 187           | 264-1247                              | 789-7350             | 1 364-3183      | (163-3343            | 784-3477                          | 719-2308        | 780-4631         | 19801 6-1921                  |
|---|-------------------------|------------------|-----------------------------|------------------------------------|---------------------------------------|---------------------------------|-------------------------------|--------------------------------|---------------------|---------------------------------------|----------------------|-----------------|----------------------|-----------------------------------|-----------------|------------------|-------------------------------|
| permits" for point-to-point helicopter trips.  NAME ADDRESS PHONE | BALLYS AN P.C. DUXZYOUG | 4462 mt side dr. | re box 2400th Dengtas 99824 | 4. TEITE MOSEZ 157 S. FEANKLIN ST. | 5. TENJA MOSEL 4462 MITSIDE DK. 35001 | 6. Alexandra Woods 70 Box 34323 | P.C. Box 21998                | 2149 LAWSON CRUKKU #7 364.2539 | tall shuron st area | 10. Church bloseng 635 Alder 57 49601 | gall shafon st 99801 | PO 22580        | 2196 A. LAWSON CREER | 14. CHRIS CURREER 13020 CROSS ST. | P.O. Box 20225  |                  | 143 Gastinen the 98801 6-1921 |
| NAME  | 1. Lett Mechapos        | 2. Hans Moser    | 3. June form                | 4. FEITE/1655Z                     | S. TENJA MOSER                        | 6. Alexandra Woods              | 7. Achan Stadman PG Box 21998 | 8. DAN FLUER                   | 9. ARX K-MANNER     | 10. Chule blasey                      | 11. Laila Finnuna    | 12. Tim Weisser | 13. Carda Piller     | 14. CHAIS CURRE                   | 15. John Funano | 16. Mark Lendulk | (17) Strand Cohan             |



Dendline for gublic comment is 1/20/95 head onch impe for background.

> Kenneth E. Mitchell, District Ranger Juneau Ranger District

Re: Draft EIS on Helicopter Glacier Tours

I support continued helicopter skiing in the Juneau Icefields and the Tongass National Forest and oppose requiring "special use permits" for point-to-point helicopter trips.

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13. 14. 15.

#### **AGENCIES AND ORGANIZATIONS**

Alaska Bound (Patty Chrichton)

Alaska Dept. of Commerce & Economic Development (Mary Pignalberi)

Alaska Dept. of Environmental

Conservation (Dick Stokes; Lorraine Marshall)

Alaska Dept. of Fish and Game (Richard Reed, John Palmes)

Alaska Dept. of Natural Resources (Bill Garry, Area Superintendent State Parks; Andy Pekovich; members of State Parks Advisory Board)

Alaska Discovery (John Sisk)

Alaska Division of Governmental

Coordination (Carrie Skrzynske, Project Review Coordinator; Susan Vitera)

Alaska Forest Association, Inc. (Marieke Nordlinger)

Alaska Miner Association (Roger Griffin)

Alaska Rainforest Treks (Karla Hart)

Alaska Sightseeing Cruise West (Tim Jacox)

Alaska Sightseeing Tours (Dwight Hutchinson)

Alaska State Chamber of Commerce (Pamela Neal)

Alaska State Legislature (Robin Taylor)

Alaska Up Close (Judy Schuler)

Alaska Wildlife Alliance (Stephen Wells)

Alaska Wilderness, Recreation & Tourism Association (Nancy Lethcoe)

Alaskans for Juneau

Alliance for Juneau's Future (Elizibeth Miller)

City and Borough of Juneau (Paul Bowers, Airport Manager; Christi Herren, Community Development; George Imbsen, Noise Abatement Committee; Therse Smith, Parks & Recreation; members of Parks & Recreation Advisory Committee; Murray Walsh, Director of Dept. of Community Dev., Jeff Carpenter)

Citizens Advisory Commision on Federal Areas (Stan Lephart)

Coastal Helicopters (Jim Wilson)

Eagle Express Line (JoAnne Robitaille)

Era Helicopters (Bill Zeeman)

Federal Aviation Administration (Steve Turner, Jack Schommer, Willis Nelson)

Friends of Berners Bay (Skip Gray)

Holland America - Westours (Frank Piva, Gordon Barr)

Juneau Audubon Society

Juneau Convention and Visitors Bureau

Juneau Empire

Juneau State Parks Advisory Board

KINY/KSUP

KJUD Television/KSUP Radio

KTOO Radio and Television (Shari Kochman)

**KTOO Television** 

**Lynn Canal Conservation Society** 

Mendenhall Glacier Tours (Donna Rich)

National Marine Fisheries (Duane Peterson)

National Oceanic & Atmospheric

Administration (Steve Zimmerman)

National Park Service (Larry Wright)

Princess Tours (Timothy McDonnell)

Ptarmigan Ptransport Ptours (Martin Perkins)

Regency Alaska Tours (Tim Worthen)

Resource Development Council of Alaska (Becky Gay)

Royal Carribean Cruises, Ltd. (Mike Ronan)

Royal Cruise Line (Bruce Good)

Shore Excursions (David Sweet)

Sierra Club Legal Defense Fund

Southeast Alaska Conservation Council

Taku Conservation Society (James and Mary Lou King)

Temsco Helicopters (Bob Engelbrecht)

U.S. Fish and Wildlife Service (Mike Jacobson, Bill Schemp, Nevin Holmberg, David B. Allen, Jessie Lockhart)

U.S.D.A. Forest Service (Chatham Area Forest Supervisor Staff; Alaska Region Regional Office Staff; Juneau Ranger District Staff)

Valley Toastmasters

World Explorer Tours (Ron Valentine)

#### APPENDIX B

### LIST OF AGENCIES, ORGANIZATIONS AND PERSONS RECEIVING COPIES OF THE FINAL EIS

#### **INDIVIDUALS**

Armstrong, Robert Arnold, Frank Baker, Bruce Barton, Michael Baxter, Fred Beck, Greg Bellotte, Diana Bethers, Mike Bowler, Bruce Bowler, Judy Branson, Marie Bridge, Sally Jo Brown, Karen Bumgartner, James Cabies, James Capp, Sam Carnes, Wayne Clough, Albert Cokeley, Debera Cooper, Bonnie Cooper, Judy Crichton, Patty

Elliot, Mr. and Mrs. Bob

Deems, Richard

Dumas, Kent Duoidp, Ruth

Erben, John
Espera, Ray
Farnell, Richard
Felkl, Fred
Frarir, George
Freeburg, Diane
Gillespie, Bill
Gillespie, Martha
Gissberg, John
Glynn, Brian
Good, Bruce
Griggs, Bruce
Hale, Carol
Hale, Stephen
Halsted, Don

Harris, Jerry Hart, Betty Lou Hart, Karla Healy, Roger Hebert, Diana Herbert, John Hegg, Karl Hegg, Vivian Herron, Shane Hiltner, Fred Hill, Ammon Hudgeon, Donna Hudson, Pete Jacobsen, Bob Jacox, Tim Johnson, Bob Kaelke, Mark Kelly, Mark Kelly, Mr. and Mrs.

Charles Kent, Chris Kirkham, Richard Kimball, Art Larson, Charley Lindh, Craig Lobaugh, Cliff Maas, Ron Mackinnon, Neil Maloney, Richard Martin, Ginger McDonnell, Timothy McPherson, Alan McPherson, Scott Merrell, Ted Morris, Bill

Neal, James O Brien, John Sr. O Brien, Marilyn Ogden, Floyd Ogden, Beth Oleiasz, Amy Owen, Patrick Palmes, John Paul, Shari Paul, Tom

Pickett, Mr. and Mrs.

George

Rawson, R. Mike
Riley, Maureen
Rohrbacher-Carls,
Rebecca Sheridan,
Schirmer, Carol
Shaub, Russel
Shaub, Thyes
Sheridan, Donna
Skrien, Sandra
Smith, Julia
Smith, Kevin
Smith, Kenneth

, ş

Stoltzfus, Mr. and Mrs.

Clyde

Sunberg, Cindy Sunberg, Jim Sweet, David Syren, David Trivett, Sam Ulrich, Chris Verilli, Chip Wallen, Lynn Wallen, R.T. Ward, Ken Welp, Gary Welp, Lawrence Williams, Anthony Windred, Michael Wright, Stephen Weltzin, Jack Whitman, Mark Wilde, Mike Zimmerman, Sue



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